HEARING ON THE PRIVATIZATION OF THE NATIONAL TECHNICAL INFORMATION SERVICE, AND H.R. 812, THE NATIONAL QUALITY IMPROVEMENT AWARD ACT OF 1987

HEARING

BEFORE THE

SUBCOMMITTEE ON
SCIENCE, RESEARCH AND TECHNOLOGY

OF THE

COMMITTEE ON
SCIENCE, SPACE, AND TECHNOLOGY
HOUSE OF REPRESENTATIVES

ONE HUNDREDTH CONGRESS

FIRST SESSION

MARCH 4, 1987

[No. 5]

Printed for the use of the
Committee on Science, Space, and Technology

U.S. GOVERNMENT PRINTING OFFICE
71-207 WASHINGTON : 1987

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

H701-51

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

ROBERT A. ROE, New Jersey, *Chairman*

GEORGE E. BROWN, Jr., California
JAMES H. SCHEUER, New York
MARILYN LLOYD, Tennessee
DOUG WALGREN, Pennsylvania
DAN GLICKMAN, Kansas
HAROLD L. VOLKMER, Missouri
BILL NELSON, Florida
RALPH M. HALL, Texas
DAVE McCURDY, Oklahoma
NORMAN Y. MINETA, California
BUDDY MacKAY, Florida
TIM VALENTINE, North Carolina
ROBERT G. TORRICELLI, New Jersey
RICK C. BOUCHER, Virginia
TERRY BRUCE, Illinois
RICHARD H. STALLINGS, Idaho
BART GORDON, Tennessee **
JAMES A. TRAFICANT, Jr., Ohio
JIM CHAPMAN, Texas
LEE H. HAMILTON, Indiana
HENRY J. NOWAK, New York
CARL C. PERKINS, Kentucky
TOM McMILLEN, Maryland
DAVID E. PRICE, North Carolina
DAVID R. NAGLE, Iowa
JIMMY HAYES, Louisiana
DAVID E. SKAGGS, Colorado ***

MANUEL LUJAN, Jr., New Mexico *
ROBERT S. WALKER, Pennsylvania
F. JAMES SENSENBRENNER, Jr., Wisconsin
CLAUDINE SCHNEIDER, Rhode Island
SHERWOOD L. BOEHLERT, New York
TOM LEWIS, Florida
DON RITTER, Pennsylvania
SID W. MORRISON, Washington
RON PACKARD, California
ROBERT C. SMITH, New Hampshire
PAUL B. HENRY, Michigan
HARRIS W. FAWELL, Illinois
D. FRENCH SLAUGHTER, Jr., Virginia
LAMAR SMITH, Texas
ERNEST L. KONNYU, California
JACK BUECHNER, Missouri
JOEL HEFLEY, Colorado
CONSTANCE A. MORELLA, Maryland

Harold P. Hanson, *Executive Director*
Robert C. Ketcham, *General Counsel*
Regina A. Snyder, *Chief Clerk*
R. Thomas Weimer, *Republican Staff Director*

Subcommittee on Science, Research and Technology

DOUG WALGREN, Pennsylvania, *Chairman*

BUDDY MacKAY, Florida
LEE H. HAMILTON, Indiana
HENRY J. NOWAK, New York
DAVID E. PRICE, North Carolina
GEORGE E. BROWN, Jr., California
NORMAN Y. MINETA, California
TERRY L. BRUCE, Illinois
CARL C. PERKINS, Kentucky
DAVID R. NAGLE, Iowa
JIMMY HAYES, Louisiana
TIM VALENTINE, North Carolina
JIM CHAPMAN, Texas
DAVID E. SKAGGS, Colorado
ROBERT A. ROE, New Jersey ****

SHERWOOD L. BOEHLERT, New York
PAUL HENRY, Michigan
CLAUDINE SCHNEIDER, Rhode Island
DON RITTER, Pennsylvania
SID MORRISON, Washington
D. FRENCH SLAUGHTER, Jr., Virginia
LAMAR SMITH, Texas
JACK BUECHNER, Missouri
CONSTANCE A. MORELLA, Maryland
MANUEL LUJAN, Jr., New Mexico

---

* Ranking Republican Member.
** Resigned February 19, 1987 (H. Res. 89).
*** Elected March 30, (H. Res. 133).
**** Ex-Officio, voting member.

CONTENTS

WITNESSES

Page

March 4, 1987:

- Dr. Bruce Merrifield, Assistant Secretary for Productivity, Technology and Innovation; accompanied by Dr. Jack Williams, Director of the Office of Productivity, Technology, and Innovation; and Dr. Joseph Caponio, Director, National Technical Information Service 9
- Dr. Ellen Detlefsen, associate professor, School of Library and Information Science, University of Pittsburgh; Mr. Robert Edgell, Government Procurement Specialist, American Federation of Government Employees; Mr. James F. Watt, director, University of Rochester Libraries; and Dr. Harold Seidman, chairman, National Academy of Public Administration—Panel on NTIS 41
- John J. Hudiburg, CEO, Florida Power and Light Co.; Dr. Frank M. Gryna, Vice President, Juran Institute, Inc.; and Mr. William W. Eggleston, Vice President for Quality, International Business Machines, Inc. 179

APPENDICES

U.S. Department of Commerce—Privatization Proposal for the National Technical Information Service, October 1986 240

"Privatization of the National Technical Information Service" by Jane Bortnick and Nancy R. Miller, Congressional Research Service 350

Assorted letters concerning the privatization of NTIS 358

Letter to Dr. Caponio, Director of NTIS, enclosing additional questions for the record; and answers received to the questions 372

Letter to David Nathan, Department of Commerce, in follow-up to the answers received to additional questions 385

Letter and Statement of the Numerical Data Advisory Board of the National Research Council 387

Statement of Special Libraries Association 391

Letter from Director, Office of Management and Organization at DOC, enclosing Article on Federal Employee Direct Corporate Ownership Opportunity Plan 403

HEARINGS ON THE PRIVATIZATION OF THE NATIONAL TECHNICAL INFORMATION SERVICE, AND H.R. 812, THE NATIONAL QUALITY IMPROVEMENT AWARD ACT OF 1987

WEDNESDAY, MARCH 4, 1987

House of Representatives,
Committee on Science, Space, and Technology,
Subcommittee on Science, Research and Technology,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:40 a.m., in Room 2318, Rayburn House Office Building, the Honorable Doug Walgren (chairman of the subcommittee) presiding.

Mr. Walgren. We will start today's hearing. Today we want to talk about competitiveness in American industry from two different directions.

In the first half of the hearing, we are going to be dealing with the Administration's budget request for the Office of Productivity, Technology and Innovation, as well as a request to privatize the National Technical Information Service.

The Committee has long supported OPTI, as it is commonly known, because of the important role it plays in advocating removal of legislative barriers to a more competitive America.

The National Technical Information Service, NTIS, is important to us because it is the focal point for the dissemination of Federal research results of industry, which in turn uses them to improve or create better commercial products.

The National Quality Improvement Award Act, which will be the focus of the last panel, is one suggestion to provide special recognition for those companies that do the best job of infusing quality throughout their organizations.

We all know that we need more of that.

I still fail to comprehend how an Administration which prides itself in being the friend of business can turn such a blind eye to the potential offered by the Office of Productivity, Technology and Innovation. This is a small organization, and in the words of Everett Dirksen, "It doesn't account for real money."

This agency exists solely to make the emergence of high technology companies easier and to eliminate blockages to a more technologically competitive U.S. industry.

Even more serious is the proposed privatization of the National Technical Information Service. Largely because of the NTIS's statutory duty to pay its own way from the sale of publications, NTIS is already among the private of Federal agencies.

Four recent studies have shown that the remaining public functions of NTIS can best be performed by a Federal Agency. The Department of Commerce, in a study completed October 1986, concluded that complete privatization of NTIS would have a devastating effect on the services that NTIS provides, and on its responsibilities under international agreements.

Privatization most likely will raise the charges for NTIS publications, and this review apparently, however, has been rejected by the Office of Management Budget which wants complete privatization of NTIS regardless of the cost, apparently.

Today we will listen to witnesses from both the scientific committee and the library community who will be affected if the NTIS does change into a totally private organization. Certainly, we are going to need compelling evidence to go this route, from my point of view.

The National Quality Award Act is simple in concept and will not require the expenditure of Federal funds. However, its impact can be significant. It is modeled after the Japanese Deming Prize, which as we know was traditionally started in Japan in honor of an American management scientist, and is given to Japanese companies in certain categories which show the highest quality management and the best adherence to the principals of statistical quality control in the running of their business.

Under this proposal, to qualify for the National Quality Award, a company would have to be ranked first or second among large businesses, small businesses, or divisions of businesses by audits conducted by professional quality experts of all aspects of their businesses.

These experts would examine customer relations, employee relations, supplier relations and the company's approach to problem solving. The biggest benefit to an individual company will be the suggestions that come out of the process. However, we hope that these companies would aspire to win an award, like the quality award that would be a National recognition of their accomplishments. Certainly, when it comes to quality, if we are able to elevate that to a level of public recognition, such a successful competition would stand any company in very good stead in the eyes of their customers.

Well, with that for opening remarks, let me turn to the Ranking Minority Member, Mr. Boehlert.

[The prepared opening statement of Rep. Walgren follows:]

OPENING REMARKS
OF THE
HONORABLE DOUG WALGREN
FOR
NATIONAL TECHNICAL INFORMATION SERVICE PRIVATIZATION
AND
THE NATIONAL QUALITY AWARD

MARCH 4, 1987

TODAY WE FACE THE ISSUES OF COMPETITIVENESS OF AMERICAN INDUSTRY FROM TWO DIFFERENT DIRECTIONS. IN THE FIRST HALF OF THE HEARING WE WILL EXAMINE THE ADMINISTRATION'S BUDGET REQUEST FOR THE OFFICE OF PRODUCTIVITY, TECHNOLOGY AND INNOVATION AS WELL AS A REQUEST TO PRIVATIZE THE NATIONAL TECHNICAL INFORMATION SERVICE (NTIS). THE COMMITTEE HAS LONG SUPPORTED OPTI BECAUSE OF THE IMPORTANT ROLE IT PLAYS IN ADVOCATING REMOVAL OF LEGISLATIVE BARRIERS TO A MORE COMPETITIVE AMERICA. NTIS IS IMPORTANT TO US BECAUSE IT IS THE FOCAL POINT FOR THE DISSEMINATION OF FEDERAL RESEARCH RESULTS TO INDUSTRY, WHICH IN TURN USES THEM TO IMPROVE OR CREATE BETTER COMMERCIAL PRODUCTS. THE NATIONAL QUALITY AWARD ACT, WHICH WILL BE THE FOCUS OF OUR LAST PANEL, IS OUR ATTEMPT TO PROVIDE SPECIAL RECOGNITION FOR THOSE COMPANIES THAT DO THE BEST JOB OF INFUSING QUALITY THROUGHOUT THEIR ORGANIZATIONS.

I STILL FAIL TO COMPREHEND HOW AN ADMINISTRATION WHICH PRIDES ITSELF IN BEING THE FRIEND OF BUSINESS CAN BE SO BLIND TO THE POTENTIALS OFFERED IT BY THE OFFICE OF PRODUCTIVITY, TECHNOLOGY AND INNOVATION. THIS SMALL ORGANIZATION, THAT EXISTS SOLELY TO MAKE THE EMERGENCE OF HIGH TECHNOLOGY COMPANIES EASIER AND TO ELIMINATE FEDERAL ROAD BLOCKS TO A MORE TECHNOLOGICALLY COMPETITIVE U.S. INDUSTRY, ONCE AGAIN IS

SLATED FOR DRASTIC CUTS.

EVEN MORE SERIOUS IS THE PROPOSED PRIVATIZATION OF THE NATIONAL TECHNICAL INFORMATION SERVICE. LARGELY BECAUSE OF NTIS'S STATUTORY DUTY TO PAY ITS OWN WAY FROM THE SALE OF PUBLICATIONS, NTIS IS AMONG THE MOST PRIVATE OF FEDERAL AGENCIES. FOUR RECENT STUDIES HAVE SHOWN THAT THE REMAINING PUBLIC FUNCTIONS OF NTIS CAN BEST BE PERFORMED BY A FEDERAL AGENCY. THE DEPARTMENT OF COMMERCE, IN A MAJOR STUDY COMPLETED IN OCTOBER, 1986, CONCLUDED THAT COMPLETE PRIVATIZATION OF NTIS WOULD HAVE A DEVASTATING EFFECT ON THE SERVICES NTIS PROVIDES AND ITS RESPONSIBILITIES UNDER INTERNATIONAL AGREEMENTS. PRIVATIZATION MOST LIKELY WILL RAISE THE CHARGES FOR NTIS PUBLICATIONS. THIS STUDY APPARENTLY HAS BEEN REJECTED BY THE OFFICE OF MANAGEMENT AND BUDGET WHICH WANTS TO COMPLETE THE PRIVATIZATION OF NTIS AT ANY COST. TODAY WE WILL HEAR FROM WITNESSES BOTH FROM THE SCIENTIFIC COMMUNITY AND THE LIBRARY COMMUNITY WHO WILL BE AFFECTED IF NTIS DOES GO PRIVATE. I, FOR ONE, WILL NEED TO SEE VERY COMPELLING REASONS TO CHANGE THE STATUS QUO AT NTIS.

THE NATIONAL QUALITY AWARD ACT IS SIMPLE IN CONCEPT AND WILL NOT REQUIRE THE EXPENDITURE OF FEDERAL FUNDS. HOWEVER, ITS IMPACT CAN BE SIGNIFICANT. IT IS MODELED AFTER THE JAPANESE DEMING PRIZE WHICH IS GIVEN TO COMPANIES IN CERTAIN CATEGORIES WHICH SHOW THE HIGHEST QUALITY MANAGEMENT AND BEST ADHERENCE TO THE PRINCIPLES OF STATISTICAL QUALITY CONTROL IN THE RUNNING OF THEIR BUSINESSES. UNDER OUR BILL, TO QUALIFY FOR THE NATIONAL QUALITY AWARD, A COMPANY MUST COME IN FIRST OR SECOND AMONG LARGE BUSINESSES, SMALL BUSINESSES, OR DIVISIONS

OF BUSINESSES, IN RIGOROUS AUDITS BY PROFESSIONAL QUALITY EXPERTS, OF ALL ASPECTS OF THEIR BUSINESSES. THESE EXPERTS WILL EXAMINE CUSTOMER RELATIONS, EMPLOYEE RELATIONS, SUPPLIER RELATIONS AND THE COMPANY'S APPROACH TO PROBLEM SOLVING. WE EXPECT THE BIGGEST BENEFIT TO AN INDIVIDUAL COMPANY WILL BE THE DETAILED SUGGESTIONS FOR IMPROVEMENT WHICH WILL BE MADE BY THE AUDITORS. HOWEVER, THOSE COMPANIES WHICH WIN THE AWARD WILL BE FREE TO USE THE AWARD IN THEIR ADVERTISEMENTS, A FACTOR THAT HAS PROVEN VERY BENEFICIAL TO RECIPIENTS OF THE DEMING PRIZE IN JAPAN.

Mr. BOEHLERT. Thank you, Mr. Chairman. Today's hearing should not have been necessary. It is prompted largely by a proposal that represents a triumph of ideology over common sense.

I am referring, of course, to OMB's directive to privatize the National Technical Information Service. I know we talk a lot about technology transfer. I can assure you, this is not what we had in mind.

The National Technical Information Service is a model Federal Agency, indeed, a model enterprise. It is a self-supporting operation that provides a vital service to American industry, especially small business and, by all accounts, provides it in exemplary fashion. It is hard to see what could be accomplished or gained by privatizing the operation.

It is easy, however, to see what could be lost. The National Technical Information Service is able to obtain domestic and foreign documents because it is a part of the Government. It is willing to archive them and provide them at a reasonable price, once again, because it is part of the Government.

These are just a few of the advantages that would be jeopardized if a private firm took over the operation.

Finally, it is not even clear that there is any private interest. As with some of OMB's proposals for the National Bureau of Standards, private interest may be a figment of a Budget Examiner's imagination. After all, much of NTIS's operation reminds one about the old joke about the shopkeeper who said he lost money on every sale, but made it up on volume.

I hope today's hearing will serve as a wake for the privatization proposal, to be followed by a burial at mark-up.

I am also distressed to reduce the budget for the Office of Productivity, Technology and Innovation, which provides useful information to business and government. I will be interested in what the impact of those cuts would be.

Let me close on a more positive note. Our final panel today will address H.R. 812, the Quality Award Act which the Chairman and I have introduced.

Yesterday, the Administration gave its nod to the Bill, and I expect we will have smooth sailing from here on in. It is nice to see that we have smooth sailing forecast for something in this town these days.

We need to do all we can to promote quality in American products. H.R. 812, OPTI, and NTIS all contribute to that effort.

Thank you, Mr. Chairman.

[The prepared opening statement of Rep. Boehlert follows:]

OPENING STATEMENT
HONORABLE SHERWOOD BOEHLERT (R-NY)
SRT HEARING ON H.R. 812, NTIS PRIVATIZATION, AND OPTI
MARCH 4, 1987

MR. CHAIRMAN:

TODAY'S HEARING SHOULD NOT HAVE BEEN NECESSARY. IT IS PROMPTED LARGELY BY A PROPOSAL THAT REPRESENTS A TRIUMPH OF IDEOLOGY OVER COMMON SENSE.

I'M REFERRING, OF COURSE, TO OMB'S DIRECTIVE TO PRIVATIZE THE NATIONAL TECHNICAL INFORMATION SERVICE (NTIS). I KNOW WE TALK A LOT HERE ABOUT TECHNOLOGY TRANSFER; I ASSURE YOU THIS IS NOT EXACTLY WHAT WE HAD IN MIND.

NTIS IS A MODEL FEDERAL AGENCY -- INDEED A MODEL ENTERPRISE. IT IS A SELF-SUPPORTING OPERATION THAT PROVIDES A VITAL SERVICE TO AMERICAN INDUSTRY, ESPECIALLY SMALL BUSINESS, AND BY ALL ACCOUNTS PROVIDES IT IN AN EXEMPLARY FASHION. IT'S HARD TO SEE WHAT COULD BE GAINED BY PRIVATIZING THE OPERATION.

IT'S EASY, HOWEVER, TO SEE WHAT COULD BE LOST. NTIS IS ABLE TO OBTAIN DOMESTIC AND FOREIGN DOCUMENTS BECAUSE IT IS PART OF THE GOVERNMENT. IT IS WILLING TO ARCHIVE THEM AND PROVIDE THEM AT A REASONABLE PRICE BECAUSE IT IS PART OF THE GOVERNMENT. THESE ARE JUST A FEW OF THE ADVANTAGES THAT WOULD BE JEOPARDIZED IF A PRIVATE FIRM TOOK OVER THE OPERATION.

FINALLY, IT'S NOT EVEN CLEAR THAT THERE IS ANY PRIVATE INTEREST. AS WITH SOME OF OMB'S PROPOSALS FOR THE NATIONAL BUREAU OF STANDARDS, PRIVATE INTEREST MAY BE A FIGMENT OF A BUDGET EXAMINER'S IMAGINATION. AFTER ALL, MUCH OF NTIS'S OPERATION REMINDS ONE OF THE OLD JOKE ABOUT THE SHOPKEEPER WHO SAID HE LOST MONEY ON EVERY SALE, BUT MADE IT UP ON VOLUME.

I HOPE TODAY'S HEARING WILL SERVE AS A WAKE FOR THE PRIVATIZATION PROPOSAL, TO BE FOLLOWED BY A BURIAL AT MARK-UP.

I'M ALSO DISTRESSED BY THE PROPOSAL TO REDUCE THE BUDGET FOR THE OFFICE OF PRODUCTIVITY, TECHNOLOGY AND INNOVATION, WHICH PROVIDES USEFUL INFORMATION TO BUSINESS AND GOVERNMENT. I'LL BE INTERESTED TO HEAR WHAT THE IMPACT OF THOSE CUTS WOULD BE.

LET ME CLOSE ON A MORE POSITIVE NOTE. OUR FINAL PANEL TODAY WILL ADDRESS H.R. 812, THE QUALITY AWARD ACT, WHICH THE CHAIRMAN AND I HAVE INTRODUCED. YESTERDAY THE ADMINISTRATION GAVE ITS NOD TO THE BILL, AND I EXPECT WE'LL HAVE SMOOTH SAILING FROM HERE ON IN.

WE NEED TO DO ALL WE CAN TO PROMOTE QUALITY IN AMERICAN PRODUCTS. H.R. 812, OPTI AND NTIS ALL CONTRIBUTE TO THAT EFFORT.

THANK YOU.

Mr. WALGREN. Thank you, Mr. Boehlert. Other comments that people want to raise?

[No response.]

Mr. WALGREN. With that, let me call our fist panel. We have today Dr. Bruce Merrifield, the Assistant Secretary for Productivity, Technology and Innovation, of the Department of Commerce. He is accompanied by Dr. Joseph Caponio, Director of the National Technical Information Service, and Dr. Jack Williams, Director of the Office of Productivity, Technology and Innovation.

Gentlemen, welcome to the Committee.

As you know, written statements will be made part of the record, and we are always open to any other written submissions that you would like to submit to us. We will recognize you to outline and underscore the points that you feel really should be focused on from your point of view.

Let's start with Dr. Merrifield.

STATEMENT OF DR. BRUCE MERRIFIELD, ASSISTANT SECRETARY FOR PRODUCTIVITY, TECHNOLOGY AND INNOVATION, ACCOMPANIED BY DR. JACK WILLIAMS, DIRECTOR OF THE OFFICE OF PRODUCTIVITY, TECHNOLOGY AND INNOVATION, AND DR. JOSEPH CAPONIO, DIRECTOR, NATIONAL TECHNICAL INFORMATION SERVICE

Dr. MERRIFIELD. Thank you, Mr. Chairman. By the way, Dr. Williams is the Director of the Office of Productivity, Technology and Innovation.

As you know, the Office of Management and Budget has recommended, again, the attenuation of this program based on the fact that its mission is largely achieved. The Commerce Department supports that recommendation, and what I would like to suggest is that the written testimony be entered in the record, which further amplifies that, and then I will be happy to answer any questions.

[The prepared statement of Dr. Merrifield follows:]

STATEMENT OF
D. BRUCE MERRIFIELD
ASSISTANT SECRETARY OF COMMERCE
FOR
PRODUCTIVITY, TECHNOLOGY AND INNOVATION
BEFORE THE SUBCOMMITTEE ON SCIENCE, RESEARCH AND TECHNOLOGY
OF THE
HOUSE COMMITTEE ON SCIENCE AND TECHNOLOGY

MARCH 4, 1987

Mr. Chairman:

I am accompanied today by Dr. Joe Caponio, Director of the National Technical Information Service, who will present separate testimony, and Dr. Jack Williams, Director of the Office of Productivity, Technology, and Innovation.

We are proposing that the authorization for the Office of Productivity, Technology, and Innovation, or OPTI, be $1,900,000 in fiscal year 1988. The money is to be used for a phase-down of OPTI. A core staff of 10 people, funded at the level of $675,000, will remain after the phase-down to advise the Secretary on technology and innovation issues.

We believe that phase-down is appropriate now since OPTI has successfully completed many of its major tasks, including:

- By the passage of the National Cooperative Research Act of 1984, a major antitrust barrier to cooperation in R&D among U.S. companies has been removed; already 54 consortia have notified the Federal Trade Commission and the Department of Justice pursuant to this new law.

- OPTI's Industrial Technology Partnerships Program has helped to stimulate over $3 billion of private sector R&D financing through the use of research and development limited partnerships (RDLPs) in the last several years. Prior to this time, the RDLP mechanism was not a significant contributer to innovation. State governments are now taking more and more initiative in innovative financing mechanisms. We believe OPTI has been influential in this process.

- OPTI's Federal Technology Policy program played an active role in the issuance of a Presidential Memorandum that makes contractor ownership of inventions government-wide policy. Provisions were included in P.L. 98-620, which extends the principle of contractor ownership to some of the largest government-owned, contractor-operated laboratories.

- Finally, recently enacted P.L. 99-502 increases private sector collaboration with our federally owned and operated laboratories.

The smaller OPTI staff remaining after the phase down will continue to function as the Department's focal point and advocate on policy matters involving productivity, technology and innovation; and to assist the private sector to form cooperative R&D ventures, especially in leapfrog technologies where the R&D efforts cut across traditional industry lines and where Federal laboratories can contribute expertise.

This request for a reduced program effort represents a compromise from recent Administration requests to terminate OPTI and I seek your support.

Regarding the National Technical Information Service, that agency's Director, Joseph E. Caponio, is here today to describe the Administration's decision to proceed with privatization of NTIS, and our plans to implement the Japanese technical Literature Act.

In conclusion, Mr. Chairman, I would like to emphasize that technological innovation and productivity enhancement remain as critical as ever to our economic growth, the development of new jobs, and the competitiveness of our industry internationally. To regain and maintain world economic leadership, the United States must capitalize effectively on its natural advantages, especially its great breadth and depth of scientific research and its unparalled entrepreneurial culture. To do this, Administration policy will continue to be directed at promoting cooperative efforts, and removing barriers to increased productivity and innovation.

Thank you, Mr. Chairman. I will be happy to answer any questions.

Mr. WALGREN. Are there other presentations to be made formally at the outset?

Dr. CAPONIO. Yes, Mr. Chairman.

Mr. WALGREN. Dr. Caponio.

Dr. CAPONIO. I also have a statement for the record, but I would also like your permission to make a very brief oral statement.

Mr. Chairman and Members of the Subcommittee, I am pleased to appear before you today to request authorization for the programs of the National Technical Information Service for Fiscal Year 1988. We are not requesting appropriated funds in Fiscal Year 1988, but I would like to review some of our recent accomplishments.

In Fiscal Year 1986, The National Technical Information Service acquired or made available 70,000 new domestic and foreign Government-sponsored research, development and engineering reports, bringing our total collection to approximately 1.7 million titles. NTIS sold 452,000 copies of documents in paper form, and 1.9 million in microfiche.

Several automated systems became fully operational, such as the on-line ordering and subscription systems, and on-line access for deposit account users. These are presently being expanded to include other features to improve service to our customers.

NTIS is continually interested in the acquisition of foreign, scientific and technical reports and we are particularly committed to expanding the acquisition, translation, and dissemination of Japanese technological information.

A number of Department of Commerce agencies are working in close cooperation to implement provisions of the Japanese Technical Literature Act of 1986. NTIS has engaged the services of an expert on Japanese information to manage its activities related to the Act.

Provisions of the Act are now being implemented, including continuation of acquisitions and translations, to a limited extent; compilation of a directory of U.S. programs and services which provide access to Japanese technical literature; the compilation of a listing of all English translations of Japanese technical documents available to the public from U.S. Government sources; work on several cooperative projects with trade and industry groups to determine needs of industry for Japanese technical information; and also, an establishment of an office in Japan staffed by the NTIS Japanese acquisition representative.

Implementation of other requirements in the Act will begin within the next two months, either by NTIS or other Department of Commerce agencies.

In Fiscal Year 1986, the NTIS Patent Licensing Program granted 51 new licenses; filed 166 foreign applications on 16 U.S. inventions; paid incentive awards to 147 Government employee inventors; and returned royalties of approximately $4.2 million to the United States Treasury.

Unlike past years, no appropriations will be required for this program in the Fiscal Year 1988. This program will be financed by the retention of licensing fees paid by licensees and by reimbursable agreements with agencies for whom NTIS provides license management services.

In accordance with the Federal Technology Transfer Act of 1986, receipts in excess of authorized program costs will be returned to the Federal agency originating the invention.

Lastly, privatization. Consistent with the Administration's privatization initiative in Fiscal Year 1988, the private sector will be offered the opportunity to operate the entire NTIS under contract with the Government retaining overall policy direction.

We are currently looking at several privatization options. One is going to the private sector to see how much interest there is in administering the entire NTIS function. Another option is a fairly innovative approach of an employee-owned company. In other words, have current NTIS employees take over the function, either on their own, or in concert with a private firm or venture capitalist.

Before we decide which approach to take, there are a number of issues that have an impact on the approach including: one, continued availability of Government agencies' materials; the disposition of deposit accounts; the assurance of minimum adverse effects on NTIS employees; what effect copyright protection has on the attractiveness of privatization; the impact, if any, on current international agreements; and a mechanism for contract oversight.

The Administration recognizes these as issues that require attention and a Staff working group is presently looking at them.

Finally, on this matter, I would like to stress to the Committee that the Administration intends to retain overall policy direction to ensure that the principal objective of NTIS, which is to make the results of Government-funded research and development available to the private sector, is maintained under any privatization arrangement.

We will keep the Committee informed of our progress.

That includes my brief statement, Mr. Chairman. I will be happy to answer any questions.

[The prepared statement of Dr. Caponio follows:]

U.S. DEPARTMENT OF COMMERCE
STATEMENT OF JOSEPH F. CAPONIO, DIRECTOR
NATIONAL TECHNICAL INFORMATION SERVICE
BEFORE THE SUBCOMMITTEE ON SCIENCE, RESEARCH AND TECHNOLOGY
COMMITTEE ON SCIENCE AND TECHNOLOGY

March 4, 1987

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before you today to request authorization for the programs of the National Technical Information Service (NTIS) for Fiscal Year 1988.

We are not requesting appropriated funds in Fiscal Year 1988, but I would like to review some of our recent accomplishments.

NTIS provides products and services designed to increase the flow of technology and strengthen the U.S. competitive position in the world marketplace. The NTIS enabling legislation (15 U.S.C. 1151-1157), passed in 1950, directed the Secretary of Commerce to establish and maintain this clearinghouse. All operating costs are funded from the sale of the products and services to business, industry, Government, and other interested individuals and organizations.

In Fiscal Year 1986, NTIS acquired and made available 70 thousand new domestic and foreign Government-sponsored research, development, and engineering reports, bringing our total collection to approximately 1.7 million titles. NTIS sold 452 thousand copies of documents in paper and 1.9 million in microfiche. Several automated systems became fully operational, such as the on-line ordering and subscription systems, and on-line access for deposit account users. These are being expanded to include other features to improve service to customers.

JAPANESE TECHNICAL INFORMATION

NTIS is continually interested in the acquisition of foreign scientific and technical reports, and we are particularly committed to expanding the acquisition, translation, and dissemination of Japanese information, spending approximately a quarter of a million dollars on this work in Fiscal Year 1987.

A number of Department of Commerce agencies are working in close cooperation to implement provisions of the Japanese Technical Literature Act of 1986. NTIS has engaged the services of an expert on Japanese information to manage its activities related to the Act. Provisions of the Act are now being implemented including: continuation of acquisitions, and translations to a limited extent; compilation of a directory of U.S. programs and services which provide access to Japanese technical literature; compilation of a listing of English translations of Japanese technical documents available to the public from U.S. Government sources; work on several cooperative projects with trade and industry groups to determine needs of industry for Japanese technical information; and, establishment of an office in Japan staffed by the NTIS Japanese acquisition representative. Implementation of other requirements in the Act will begin within the next two months, either by NTIS or other Department of Commerce agencies.

PATENT LICENSING PROGRAM
In Fiscal Year 1986, the NTIS Patent Licensing Program granted 51 new licenses; filed 166 foreign applications on 16 U.S. inventions; paid incentive awards to 147 Government employee inventors; and returned royalties of approximately $4.2-million to the U.S. Treasury. Unlike past years, no appropriations will be required for this program in the Fiscal Year 1988. The program will be financed by the retention of licensing fees paid by licensees and by reimbursable agreements with agencies for whom NTIS provides license management services. In accordance with the Federal Technology Transfer Act of 1986, receipts in excess of authorized program costs will be returned to the Federal agency originating the invention.

PRIVATIZATION
Consistent with the Administration's privatization initiative, in FY 1988 the private sector will be offered the opportunity to operate the entire NTIS under contract, with the Government retaining overall policy direction. We are currently looking at several privatization options. One is going to the private sector to see how much interest there is in administering the NTIS function. Another option is a fairly innovative approach of an employee owned company. In other words, have current NTIS employees take over the function, either on their own or in concert with a private firm or venture capitalist. Before we decide which approach to take, there are a number of issues that have an impact on the approach including:

o Continued availability of Government agencies' materials
o Disposition of deposit accounts

- The assurance of minimum adverse effects on NTIS employees
- What effect copyright protection has on the attractiveness of privatization
- The impact, if any, on current international agreements
- Mechanism for contract oversight

The Administration recognizes these as issues that require attention, and a staff working group is looking at them.

Let me assure the Committee that, as Director of NTIS, I am concerned with the effects any change in NTIS will have on its employees. To this end any contract offer, if that is the approach selected, will include a requirement that the contractor offer comparable employment to NTIS staff. I am committed to ensuring their rights are protected and that they have the opportunity to participate in privatization decisions.

Finally, on this matter, I would like to stress to the Committee that the Administration intends to retain overall policy direction to insure the principal objective of NTIS, which is to make the results of Government-funded research and development available to the private sector, is maintained under any privatization arrangement. The Administration believes this proposal can be implemented to the benefit of all parties, and are working towards this objective. We will keep the committee informed of our progress.

This concludes my statement, Mr. Chairman.

NATIONAL TECHNICAL INFORMATION SERVICE

A-76 Activity

Date	Function	Results
May 1980	Subscriptions - This function includes entering the order, maintaining mail lists, ordering mailing labels, and answering customer correspondence.	Only one bid was received in response to the solicitation The bid was evaluated and found to be less than satisfactory against the evaluation criteria set forth in the solicitation. Solicitation was cancelled and function remained in-house.
July 1980	Input Processing - This function includes acquisition, indexing, abstracting, and keyboarding of all material entering NTIS' collection.	Several qualified bids were received in response to the solicitation. The cost comparison prescribed by OMB Circular A-76 showed it cost effective for the function to remain in-house.
Feb 1985	Information Analysis - This function comprises the indexing function for all documents entering the NTIS collection.	A management study was performed to determine the most efficient in-house organization. A solicitation was issued and qualified bids were received in response to the solicitation. The cost comparison prescribed by OMB Circular A-76 showed it cost effective for the function to remain in-house. The most efficient organization was implemented. Cost differential between in-house and contractor's low bid was $1,165,006 for three years in favor of in-house performance.
March 1985	Order Fulfillment - This function comprises the warehouse function which includes processing orders, receiving, storing, and and shipping documents and other NTIS products being offered for sale directly or indirectly, maintaining paper copy archives and distributing subscription products.	A management study was performed to determine the most efficient in-house organization. A solicitation was issued and qualified bids were received in response to the solicitation. The cost comparison prescribed by OMB Circular A-76 showed it cost effective for the function to remain in-house. The most efficient organization was implemented. Cost differential between in-house and contractor's low bid was $656,854 for a three period in favor of in-house performance.

Date	Function	Results
Dec 1985	Administrative Management - This function comprises the administrative services necessary to support NTIS' operations.	This function was reviewed to identify possible cost and/or position savings. This review resulted in a reduction of five full time equivalent positions.
June 1986	Processing and dissemination of technical information - This review was comprised of the input processing function and those activities associated with receiving and processing orders.	This function was reviewed to identify possible cost and/or positions savings. Although no positions were eliminated as a result of the review, additional personnel will not be required because of the changes made.

Mr. WALGREN. Thank you, Dr. Merrifield. Let me ask you to ruminate a little bit with us, Dr. Merrifield, on OPTI and its activities this last year. What have we been doing?

Dr. MERRIFIELD. There are a whole range of things that we have been involved with. Of course, one of the critical ones has been the continued formation of consortia that have been allowed by the National Cooperative Research Act of of 1984. Perhaps one of the most notable of these will be SEMATECH, the consortium of the electronics industries companies which seeks to recapture the technical-industrial leadership in mass memory semiconductors.

This will be perhaps a multi-billion dollar effort that will be an ongoing effort to recapture and maintain that lead from now on. I think is a very important thing. It has National security consequences, as well as industrial survival consequences. Whoever owns mass memory owns super-computing, telecommunications, flexible manufacturing and thousands of different applications. It is essential that we maintain leadership in that area, and hopefully, I will have the business plan for that operation in the next period of weeks and we can begin to get that one started.

It will be largely private-sector funded; hopefully, majority funded by the private sector.

By the way, since the National Cooperative Research Act of 1984 was passed, there have been about 56 of these consortia formed, quite a few of them in my office. I think this is a very important thing, because, again, no individual company can any longer stand up to whole nations that target their industry with vertically integrated, subsidized operations.

So, the collaborative efforts are increasingly necessary to be competitive, to generate the next generation technology that will maintain technical and industrial leadership for us, and this is why this is such an important initiative.

One of our other programs has been to expand this type of operation. There are 150 incubators now around the country that are starting these small businesses. Of course, it has been the Science and Technology policy that this Committee has established in this country that has created a unique historically unique climate for entrepreneurial activity. The measure of that is that we are continuing to create hundreds of thousands of new small businesses every year—close to 700,000 last year, and many millions of new jobs; 25 million, as you know, over the last 15 years, and about half of them in the last 4 years, as this process is accelerating.

It is this entrepreneurial activity that is really restructuring the U.S. economy from the bottom up and creating the jobs, while the Fortune 500 actually continue to lose jobs.

It is a powerful process and this is an important thing. The R&D Limited Partnership has contributed to this. The Venture Capital Funds have contributed to the formation of these new businesses, which multiply themselves in terms of support functions or service functions that grow up in support of them.

The incubators though are a particularly important aspect of this and a growing one. We can create these anywhere in the world or anywhere in the country, preferably around universities or Government laboratories. These are springing up continuously. We supply a lot of support and help to the State and local communities in forming these.

Mr. WALGREN. Could I ask you to elaborate on the contact between the State and local governments and OPTI with respect to these incubator programs that have developed?

Dr. MERRIFIELD. All right. This is really a part of our small business support function. We are in contact with most of the States in the country now, and many local communities, as well, to help establish these incubators. Basically, this is a process that we understand well; we know exactly how to do it.

We provide information on how to set these things up; the data bases of companies that would be interested in collaborating within these, in the given States. We develop computerized State profiles for industries in each State and compare them with surrounding States, and other States where a given technology may be particularly effective.

Basically, our role is a catalytic role that helps encourage the formation of these things and helps to train the people that are involved in running them, so they can identify those new technologies that have a high probability of commercial success.

We have what we call a "constraint analysis" that gets eight-to-nine out of 10 successes, instead of the traditional one or two out of 10. These and the funding data bases, the R&D Limited Partnership Funds, the Venture Capital Funds, and so forth, we make available to the directors or heads of these incubators as they form so they have a solid base of information upon which to operate.

A good example of one of these, started just a few years ago in New Haven, Connecticut. Sam Chauncey, former Dean at Yale, started it. He started 112 businesses in the last several years. They are creating many jobs and training many of the—skilling through Yale and other facilities there—jobless people in New Haven, where there has been a heavy concentration of unemployment.

These are now starting up in Salt Lake City, Boise, Idaho, and Arkansas and all over the country.

Mr. WALGREN. That is a really good contribution. What else can you tell us about the Small Business Development Program? How much of it has been focused on the R&D Consortium and what other kinds of activities have you been doing this year with respect to small business development?

Dr. MERRIFIELD. First of all, in the formation of these small businesses, one of the key elements has been the R&D Limited Partnership, which is the only funding mechanism for activities in the R&D phase. Venture Capital basically picks those up at the point of commercialization and provides first, second, and third-round financing for these new start-up companies. So, there is a complementary nature there for these operations.

Mr. WALGREN. But the point being, as I understand, when you say the only funding source, this comes from the private sector, even at the start in the R&D Limited Partnership; am I not correct?

Dr. MERRIFIELD. Yes.

Mr. WALGREN. And isn't it a problem with the weight of antitrust tradition in our country, a lot of people out there don't think they can get together and do things that they might very well be able to, were not for the chilling effect of the anti-trust law. Your office has enabled them to see the potential by your communication with them. Is that correct?

Dr. MERRIFIELD. That is very true. And it is still a process of education, because there are still a lot of people that aren't either aware, or quite believe that the anti-trust laws have been liberalized to allow these collaborative R&D efforts.

By the way, the important continuing aspect of anti-trust legislation is Section 7 of the Clayton Act, which we really need to modify now to allow collaborative efforts to go past R&D into flexible computer integrated manufacturing systems.

This is really a very important understanding because manufacturing in my opinion within the next decade will largely—that is, that manufacturing that survives in this country—be flexible computer integrated systems, where a given plant will make hundreds of different products for different companies in different industries, continuously reprogrammable to make new things and modify the old; labor costs will go down from 18 to 20 percent on average in manufacturing to less than five percent. Basically, manufacturing will become a service function, where you buy time on a facility to make one-of-a-kind or a thousand-of-a-kind, essentially at the same unit cost.

Mr. WALGREN. How does the Clayton Act relate to that?

Dr. MERRIFIELD. Section 7 of the Clayton Act is a per se violation of the collaborative efforts that are going to be necessary to develop, manage and operate these computer integrated systems. This is probably the most cogent reason why we need to modify that particular Act.

Mr. RITTER. Will the Chairman yield?

Mr. WALGREN. I will be happy to yield.

Mr. RITTER. Just to follow up on that one point. Dr. Merrifield, the Administration, in its competitiveness package is looking at broadening the scope of the R&D Partnerships to include additional collaboration amongst U. S. firms, beyond R&D.

This is Section 7 the attack that the Administration intends to take in loosening the bonds of the anti-trust law?

Dr. MERRIFIELD. I think so. In particular, the semiconductor consortium is a particularly important near-term model of this. The purpose of that function is to develop a computer integrated, flexible manufacturing system for 16- and 64-megabyte chips that will recapture that technical leadership.

No individual company, not even an IBM can do that alone, and it is going to take a shared ownership, development and management of a manufacturing function in order to reestablish leadership in that area.

Mr. RITTER. So you are saying that the Administration's competitiveness package focus on loosening anti-trust law will deal with this Section 7, will deal with flexible manufacturing, will deal with syn-type systems, and will be narrow in that extent, and that is the extent of what the Administration is thinking of right now, in loosening anti-trust.

Dr. MERRIFIELD. I think the Administration also has been continuing to be concerned about pro-competitive mergers and consolidations, in addition. But this is another dimension which I feel is particularly critical, because without shared ownership, many individual companies generally don't have the skills——

Mr. RITTER. I am just trying to narrow this, because this is so important to people like the Chairman and I, and Pennsylvania, in some of our industries in terms of shared pro-competitiveness——

Mr. WALGREN. Let me ask if the Gentleman would yield back.

Mr. RITTER. Yes.

Mr. WALGREN. I wanted to try to get back to the focus of what OPTI has done in this last year. As I understand it, we have used about $3 million, is that right, of our budget this current executing year; $3 million.

Dr. MERRIFIELD. Yes.

Mr. WALGREN. We have your involvement in the Limited Partnerships, and particularly the communication of that to the State and local Governments, and the small businesses, and I wanted to ask, that certainly represents part of the effort.

How much of the total effort is that and what are some of the other things relating to small business development that our $3 million is delivering to us this year?

Dr. MERRIFIELD. One of the things, of course, is the Technology Transfer Act of 1986, that was recently passed. I think this is really landmark legislation. It is much more important than I think many of us have realized yet. It will release literally tens of billions of dollars of some of the world's most advanced technologies from our Government laboratories, to be exclusively licensed to small, medium-sized companies that will take advantage of it now for the first time.

Basically, in the past, much of the work that we do in our Government laboratories has just been published, it goes into the open world pool. The Japanese and everybody else blanket our universities, our Government labs, pick it up essentially for nothing and subsidize it for the development.

One of the clauses in that Act, which is much more important than I think we realize, requires or authorizes the laboratories to withhold that information from a foreign nation that doesn't provide reciprocal access to their facilities that we provide them.

Basically, what it means is that it is going to dry this pool up for foreign access, and the Japanese, by the way, are very unhappy about this.

Currently, we are part of a team that is renegotiating the Science and Technology Agreement with the Japanese, and this is one of the conditions that we are considering before we would renew such an agreement which expires April 30th.

I will come back to that, if you would like. The point is that the Technology Transfer Act now puts in our hands a tremendous capability to utilize those Government laboratories in collaborative efforts with small businesses and create new small businesses, and we see this as tremendous proliferation of this entrepreneurial activity that is really restructuring our economy.

Mr. WALGREN. And it puts OPTI in the position to try to encourage that very directly, is that right? And what steps do you take to try to do that?

Dr. MERRIFIELD. Well, first of all, we are making sure that every laboratory understands the nature of the Act and the authorizations that would come to them.

Secondly, we are beginning to bring in key people from each of those laboratories and put them through our intern program that teaches them the constraint analysis and our computer simulation technologies, methodologies that identify technology which has a high probability of commercial success, so that they can effectively patent and then license the technology that they have.

It also provides an incentive for the first time for those laboratories to do that because royalties come back to them now to further their mission, rather than going into the Treasury. So there is going to be a very proactive activity there from the Government laboratories.

But our key problem is to make sure that they understand the commercial world which is not something that they have understood well. This is part of our mission, to bring them up to speed in that area and provide them with the data bases and so forth that they need to be a proactive agent of change that does license out the technology that they develop.

Mr. WALGREN. Are there efforts of OPTI this year that you would like to bring to our attention as being helpful to the country?

Dr. MERRIFIELD. One of the things we are continuing to do is to develop technologies or business assessments, which have been responsible for the formation of some of these consortia that we develop. In other words, we run these competitive assessments in key areas of technology; ceramics, biogenetics, flexible manufacturing and so forth.

We hold conferences and invite in all the people, companies and industries that are interested in those technologies. Then on the basis of those conferences, we begin to put together consortia to develop advanced technologies in each of those areas. That has been a very powerful stimulus to the formation of these consortia.

Our metric program, of course, is I think very important. Again, all the world except for the United States is in metric systems. We were one of two countries, up until last July. The other one was Brunei, a little principality in North Borneo, but they have now gone metric, too. So we are the only non-metric country in the world.

Actually, we are making more progress than many realize. Much or all of the automotive industry, the packaging industry and so forth are metric, and we are steadily making progress. We see the flexible manufacturing systems though as being the thing that will really accelerate this, because in an FMS-type system, you can make anything—you can program the system to make metric units as well as anything else.

So this will be a powerful stimulus to moving us into the rest of the world.

Mr. WALGREN. What is the dollar value of our metric effort in OPTI?

Dr. MERRIFIELD. $172,000.

Mr. WALGREN. Well, let me turn to the Ranking Minority Leader, Mr. Boehlert.

Mr. **Boehlert**. Thank you, Mr. Chairman. I will focus on NTIS, and I will be brief at the outset, so my colleagues, particularly Ms. Schneider and Mr. Ritter of Pennsylvania, who are so vitally concerned with the problem of competitiveness, can get back to OPTI.

Is it fair to say, Dr. Merrifield, that the privatization request in the budget is OMB-driven?

Dr. **Merrifield**. It is an OMB request, that is correct.

Mr. **Boehlert**. I used the word driven. Perhaps "forced."

Is there any indication that anyone at OMB read the Department of Commerce report of last October?

Dr. **Merrifield**. I don't have any idea.

Mr. **Boehlert**. Dr. Caponio, do you know if anyone down at OMB read that report?

Dr. **Caponio**. I don't know whether anyone at OMB read the report. The report was submitted to OMB, but I don't know.

Mr. **Boehlert**. I would urge them to do so and I am going to follow this up with a request to the people down there to read it, because among other things, and I have the report before me—just as a famous Senator used to say, "I have before me a report." But, among other things, it concludes, "Any extensive move toward further privatization of NTIS creates significant risks and costs for Government, for NTIS customers, and for the information industry." And then it says, "The Executive Summary," and I want to get this on the record, and I want to get some comment from you on this, "given a program so complex and so privatized, any decision to make further privatization moves must be supported by evidence of extensive benefit and minimal costs; such evidence does not exist."

In fact, as the report clearly demonstrates, the evidence is that extensive privatization presents substantial costs and risks for the Government, for NTIS customers and for the information industry as a whole.

Can you give me any logical reason why, in view of this extensive study by experts in a Department for which I have great respect, why we would move forward with a request like this at this time?

Dr. **Caponio**. Mr. Congressman, I think that there are certain advantages to the privatization effort. First of all, it is consistent with the overall administration of turning over to the private sector those activities which can be performed by the private sector as equal or perhaps even better.

Mr. **Boehlert**. Doctor, if I may interrupt you, and I support that—very supportive of that basic concept. I would like to make Government smaller, not bigger. But in this instance, we had the experts study it, and the expert say that all the evidence points to substantial costs and risks for the Government and for the people we are trying to serve.

Isn't it a matter where there are pros and cons to just about everything?

Dr. **Caponio**. As you know, Mr. Congressman, yes. There is never a perfect solution to any problem. At best you have options, and the options usually contain the advantages and disadvantages, and I am sure with privatization, as well as perhaps the contracting out—incidentally, I would like to make a distinction between complete privatization, on the one hand, which is turning over the activity without oversight or policy guidance, in contradistinction to contracting out, or the development of a Go-Co, a Government-owned contract-operated activity, which would retain all of the essential functions that the NTIS and the Department presently maintains.

Mr. **Boehlert**. But, Doctor, did not the study review all of those possible alternatives, and reject them all?

Dr. **Caponio**. To the best of my knowledge, Mr. Congressman, I believe the study examined most of those issues and rejected them.

Mr. **Boehlert**. Let me ask, is there anyone within the Department that is wedded to this proposal?

Dr. **Caponio**. We are committed to supporting the Administration's privatization efforts.

Mr. **Boehlert**. When OMB plays the tune, and then says, "March," and everybody in the Government has to march. But is there anyone with some degree of conviction that can tell this Subcommittee that this proposal makes sense?

That is unfair, I know, Dr. Caponio. I just wanted to get it on the record. Because it doesn't make any sense to me.

Mr. Chairman, I would like to pursue this further, but I would appreciate it if we could give our other colleagues here an opportunity to address a line of questioning on OPTI.

Mr. **Walgren**. We will turn to other Members, and they will have their opportunities now to question. Let me recognize Mr. Price.

Mr. **Price**. Dr. Caponio, if we could pursue this matter of privatization a little further. In the privatization study, did any contractors indicate an interest in assuming all NTI's functions, including the unprofitable acquisitions, such as input processing and archiving?

Dr. **Caponio**. Mr. Congressman, there have been in the past many expressions of interest in either the operation of certain functions or activities within the NTIS, but as far as the indication of interest in terms of operating the entire NTIS, I am not aware of any.

Mr. **Price**. Well, if it turned out that no contractor did have that kind of interest, is it possible that appropriations would then be requested by the Department for those functions, if a contractor would not take them on?

Dr. **Caponio**. I do not envision, Mr. Congressman, the request for any additional appropriations, simply because the NTIS at the present time operates on a fully cost recovery and self-sustaining basis. I would not see, even with a contracting out of some form, that this would be vitiated in any way.

Mr. **Price**. Do the more profitable functions now cover the more unprofitable functions?

Dr. **Caponio**. Yes.

Mr. **Price**. Would contracting out upset that arrangement?

Dr. **Caponio**. Not necessarily, Mr. Congressman. Contracting out would simply enable the NTIS to maintain the policy guidance and the oversight to require just exactly what NTIS currently performs, with any contractor.

Mr. **Price**. Well, we have current sources of documents, like foreign governments, the intelligence community; one wonders, would they be willing to deal with a private sector contractor rather than the Government. Do we have any evidence on that?

Dr. **Caponio**. Mr. Congressman, there are two modes of input into the NTIS; one is by the private sector, and the other is by the Government sector. As far as the input from the private sector is concerned, I am not aware of any prohibitions.

With respect to the input from other foreign governments, there may be some question. We have been informed, for example, that the Japanese Government would prefer to deal directly with the United States Government rather than with a private organization.

Mr. **Price**. Does that influence your own view about the liability of privatization?

Dr. **Caponio**. Not necessarily, Mr. Congressman. Because as I said before, if the NTIS maintained overall policy direction and guidance and oversight, that simply means that the Department and NTIS is maintaining the function and the mission, and therefore, are in a position to deal with the respective foreign governments for input.

Mr. **Price**. You think that reluctance of the foreign governments to deal with the private firms could be overcome?

Dr. **Caponio**. I don't know, Mr. Congressman. Again, I have to repeat that in terms of a contracting-out facility, NTIS and the Department of Commerce would still be negotiating with the foreign governments. The contractor, in that particular instance, would simply be carrying out the processing functions which would be delineated in accordance with the specifications generated by the Department.

Mr. **Price**. What A-76 reviews of NTIS have been undertaken since 1980?

Dr. **Caponio**. We have had approximately five to six A-76 exercises conducted since 1980. We could make available to you a complete history of those activities.

Mr. **Price**. Do you have any idea how much money has been spent on those A-76 reviews in the past?

Dr. **Caponio**. I would estimate approximately $275,000 has been expended on the conduct of these A-76 activities.

Mr. **Price**. Why does the Department want to continue asking the A-76 question, when the answer has come back several times before that it is more cost effective to do these activities with Government employees?

Dr. **Caponio**. Mr. Congressman, in this particular instance, if the NTIS were contracted out, I don't believe the A-76 directive is applicable. I think that NTIS could actually obtain an exemption to the A-76 exercise.

Mr. **Price**. Thank you, Mr. Chairman

Mr. **Walgren**. Thank you, Mr. Price. The gentlelady from Rhode Island, Miss Schneider.

Miss. **Schneider**. Thank you. I would like to work under the assumption that privatizing NTIS is not a good idea. To me, it seems pretty clear so I am not going to ask a lot of questions on that.

But the report done by the Commerce Department did suggest that there be some contracting out of advertising of NTIS operations. What are your plans to implement that recommendation?

Dr. CAPONIO. Madam Congresswoman, in view of the fact that we have been requested to consider the full contracting out of the NTIS, certainly the contracting out of the promotion and the advertising would be an integral part.

Independent of contracting out, we would still consider the contracting out of that selective function.

Miss SCHNEIDER. Perhaps I am trying to get at something else. Working under the assumption that your work not be contracted out and that you not be privatized, it seems to me that despite the fact—and I do commend you for being a self-sufficient entity, after the commendations, let's move on to some constructive recommendations.

It seems to me that there is a great deal of work that can be done in further communicating what services you provide to a broader audience. The most obvious one I would think of would be to Members of Congress. I guarantee you that if you were to walk out in the hall now and bump into a Member of Congress and ask them if they knew what NTIS is, they would have no idea.

I will further state that I know who you are and what you do strictly by accident; not because of my serving on this Committee, but I will say that insofar as how you assist different States, and the State analysis that Dr. Merrifield mentioned—perhaps that was under OPTI, or was that also under NTIS?

Dr. CAPONIO. Both.

Miss SCHNEIDER. All right. It seems to me that we Members of Congress are the great conveyors and supposedly helpers of industries and State and local Governments, that to have this information at our fingertips would certainly be very helpful.

So, just to advertise to Members of Congress would be one step in the right direction. I would like to leave you with that recommendation.

Dr. CAPONIO. Thank you, very much. We will certainly take you up on that and we will advertise and promote to all of the Members of the Congress.

Miss SCHNEIDER. Terrific.

Dr. MERRIFIELD. May I make a comment

Miss SCHNEIDER. Yes, Dr. Merrifield.

Dr. MERRIFIELD. NTIS is much broader than just the access base for the Federally funded technology, which is very significant.

In recent years, Dr. Caponio has also cross-licensed NTIS with almost all the other technical data bases here and abroad and we now have some of the National security unclassified open source data coming into it. So it is basically a one-stop world scan data base, which will immediately access most of the critical information on any subject anywhere in the world. That is an important thing now, given the global nature of technology and the activities that are going on all over the world.

The first thing you have to do is find out if somebody has already invented your wheel, and what other technology may be complementary to what you are doing. So this is a very important aspect of this function.

Miss **Schneider**. Let me mention that one of the most important aspects, it seems to me, in terms of transferring information and technology is that of recycling hazardous wastes. If our country has the capability of recycling or reusing 75 percent of our hazardous wastes, let me tell you that most industries are not aware of that, nor are most State and local governments.

Now this is an area where we are taking remedial action, the Federal Government is spending billions of dollars through Superfund to clean up abandoned hazardous waste sites, but we are continuing to perpetrate this problem because, I believe, the information is not out there. People want to do the right thing, but they do not know how.

The same thing is true with energy information. Fortunately, I just got a plan implemented at the Department of Energy which will be an information and technology transfer for least-cost energy systems, because I predict that we are going to have another energy crisis.

It seems to be that this information is moving infinitely too slowly to the States, and I would like to see a major promotional or advertising information system in place and I would hope that legislation would not be necessary, but I would also like to hope that I can make this recommendation here and now and see it picked up on, and I will follow up on it.

Dr. **Merrifield**. We hear you.

Miss **Schneider**. The final question that I would like to ask would be directed to you, Dr. Merrifield. In your reference to SEMATECH. I would like to play Devil's Advocate for a moment and ask you—it seems to me that you are very much embracing the proposal of the SEMATECH suggestions; is that right?

Dr. **Merrifield**. Indeed. We have no alternative. We cannot exit this business.

Miss **Schneider**. Well, one of the things that concerns me is that I do agree that vertical integration is necessary, but I question the Federal Government subsidizing such an effort because I question whether or not that same type of subsidization will not be requested for numerous other industries. I am trying to make my way through the mindfield right now of smoke and mirror, where on one side our Administration says that we believe in the private sector and the marketplace making such determinations; and no, we are not going to have a National industrial policy; and no, we do not want to copy the Japanese and have a MITI, but then in reality what we are doing is not only subsidizing our agricultural exports, but we are also embarking setting up such an effort as SEMATECH, where we are essentially supporting the vertical integration of the computer industry.

Please, do not use the excuse of National defense. Any other answer I will have open ears to.

Dr. **Merrifield**. Okay. I couldn't agree more with you, and of course, the whole point is, I see the Government role as a catalytic role. It doesn't try to manage and direct anything in the private sector, but rather catalyzes the collaborative efforts that are managed and directed in the private sector to do these things. That is what our role has been in forming these consortia, and it is the role that we are playing here.

Now the private industry group people themselves would much rather fund this themselves, and the whole idea of a consortium is to pool resources and capabilities and minimize the risk to any individual company. I would much prefer that it be done completely within the private sector by the private sector.

Miss SCHNEIDER. But you do not see a way that that can be accomplished?

Dr. MERRIFIELD. Well, I don't see why it can't be, to tell the truth. In fact, this is the point—to the degree that the Department of Defense or any other agency sees a Governmental need, it can be a parallel track of effort but it doesn't have to be directly involved.

Miss SCHNEIDER. I am very close aligned with the semiconductor industry. I spoke to the semiconductor industry yesterday afternoon, as a matter of fact, and I know that that they were testifying before the Senate, and as co-Chair of the Competitiveness Conference, I have been instrumental in making them available to brief Members of Congress. But, as I said, I am playing Devil's Advocate with you.

I just need the benefit of information as to know whether or not you will give the same kind of attention to other industries that approach you for the formulation of such consortia.

Dr. MERRIFIELD. We have. That is the point. There are 56 other ones that we have already assisted in forming, and they are all private sector operations with no Federal support

Miss SCHNEIDER. What are the broad categories that they fit into? For example, are they in the machine-tool category, or pharmaceutical, or——

Dr. MERRIFIELD. Oh, they cover the whole spectrum of activities; everything from biogenetics, software, space, machine tools, semiconductors, of course; all sorts of electronics areas, advance ceramics, composites and so forth. It is a tremendous spectrum. Pump manufacturing, for example. The variety is really quite surprising; it covers just about any area that you can think of.

Miss SCHNEIDER. My final comment relates to part of the effort, I understand, behind wanting to privatize this particular Agency, is to improve productivity and oftentimes, we cannot measure productivity by the bottom line figure of being financially self-sufficient.

As we know, Federal employees are essentially protected and there is very little opportunity to provide incentives—primarily incentives for improving output there. But I wonder if there is any effort, seeing as how it is such a small agency, and so compact, to really broaden the output and have greater quality control there.

Dr. CAPONIO. In response to your question and comment, I am pleased to say that the National Technical Information Service has introduced a number of activities, one of which is Quality Circles. Of course, as you well know, the Quality Circle concept has had considerable success in Japan.

As a result of that particular development and related activity, NTIS has been chosen by the State of Virginia as one of the three finalists to receive the Senator Warner and Senator Trible Award for Productivity in the State of Virginia.

Miss SCHNEIDER. Correct.

Dr. CAPONIO. So we are in the final——

Miss **Schneider**. Go for it. I have no further questions, and I commend you on your efforts, but as we know, there is always room for improvement in Government.

Dr. **Merrifield**. Thank you.

Dr. **Caponio**. Thank you.

Mr. **Price** [presiding]. Thank you. Mr. Ritter.

Mr. **Ritter**. Thank you. Just a short follow-on to the NTIS issue, which I had not intended to discuss. It does say that the report was a Commerce Report, but was that report conducted by NTIS, itself?

Dr. **Caponio**. No, Mr. Congressman. The report was conducted by an interdepartmental task force, with members from the NTIS serving on the departmental task force.

Mr. **Ritter**. As I understand it, Commerce is intending to conduct an additional study. There is talk of an additional study within the Department of Commerce, to go over the report and to further dig into the issue.

Dr. **Caponio**. Mr. Congressman, there is underway now an Administration task force to review some of the critical issues, prior to determining the form of privatization. I alluded to many of those issues in the testimony.

Mr. **Ritter**. And indeed, this report did recommend closer cooperation between NTIS and the private sector, contracting out of certain NTIS operations, and the possibilities of actually converting NTIS to a Government Corporation. In other words, there is a feeling that perhaps the overall output of NTIS, or the task that NTIS has can be performed better and at a higher level by doing some of these other things. Is that correct?

Dr. **Caponio**. Yes.

Mr. **Ritter**. Because it would seem to me, and correct me if you disagree, that overall some of our competitor nations seem to deal far more effectively with rapid distribution of world-wide available information in the sciences and technology than we do.

Dr. **Caponio**. You are absolutely right, Mr. Congressman.

Mr. **Ritter**. So indeed, there is room for improvement in the system. The Japanese have a counterpart to NTIS, do they not?

Dr. **Caponio**. Yes, Mr. Congressman, they do.

Mr. **Ritter**. And their counterpart has far better access to our information than NTIS has to their information. Is that true?

Dr. **Merrifield**. About four percent of the Japanese technical literature is translated into English. They translate almost all of our stuff into Japanese; that is correct.

Mr. **Ritter**. That is a major barrier, obviously. Where do you see the solution to that translation problem coming from? Is that something that should be a corporate effort, sold to the American private sector; should it be a Government effort; should it be a partnership?

How do we get around that rather terrible imbalance?

Dr. **Merrifield**. That is a very important question. One of the things that we are doing as part of this renegotiation of the Japanese-U.S. Science and Technology Agreement is insisting that the Japanese at least abstract much of their technical literature in English so that we can access that into NTIS.

We actually get the Japanese——

Mr. **Ritter**. Is it their responsibility, or is it ours, or——

Dr. MERRIFIELD. Well, this is one of the conditions being considered.

Mr. RITTER. We do not abstract our technical literature into Japanese, do we?

Dr. MERRIFIELD. No, we don't, but basically, they are taking tremendous advantage of the fundamental research that we do, that they are not competent or don't have the academic infrastructure to do. So they have a free ride here, and what we are saying is that this is an inequitable situation.

Mr. RITTER. Exactly. I think the point I would like to make is that there is a tremendous imbalance in the information flow presently, and that perhaps our behavior in just extending the status quo is not sufficient in order to deal with this imbalance. We need new ideas, new initiatives in dealing with the Japanese directly in negotiations, dealing with our own investments, and translation, whether it is private or corporate, and I would hope that OPTI and Commerce and NTIS, together, seek to provide us in the Congress with appropriate paths towards solving this imbalance so that we can get on and take advantage of what they are doing the way they take advantage of what we are doing.

I would like to move on to the arena of competitiveness and ask you, Dr. Merrifield, what do you envision, and have you been called upon in terms of the OPTI role in the President's package on international competitiveness?

Dr. MERRIFIELD. We have been participating with the working group of the EPC to develop some of those recommendations. My personal feeling is that there are three things that are about ten times more important than anything else.

One of these is the stimulation of continuous creation of next-generation technology based on our basic research, which we uniquely have, more than anywhere in the world. That is absolutely necessary to maintain technical and industrial leadership.

As other people copy us, and take over markets, we have to be generating new technology continuously.

The second thing is the flexible computer integrated manufacturing systems that are absolutely essential in my opinion for the survival of manufacturing in this country. It will happen with or without us. It has to happen with us.

And the third thing is the lifelong continuous reskilling of the work force, because any set of skills, including ours, can be obsolete in five to ten years from now. Lifelong reskilling has to be one of our top National priorities.

Mr. RITTER. Dr. Merrifield, you know, as I look at your testimony here and I look at the progress made on the National Cooperative Research Act of 1984, the OPTI's Industrial Technologies Partnerships Program, your role in the Presidential Memorandum, talking about contractor ownership—I think there is a lot that can come beyond that, as well, in that direction, from federally-generated R&D results. And then the private sector collaboration with Federally-owned and operated laboratories, which you played a major role in. It seems to me, you have a really good record.

It seems to me that you are the only ongoing activity in the Federal Government that deals with the question of international industrial competitiveness. I, for one, am concerned. I think this is a good track record.

I think the kind of things you have just mentioned are three critical things in dealing with this industrial international competitiveness issue, and I am concerned that some of the few people who have been dealing with this issue over the last number of years are being phased out.

I would like to register that concern and register it very strongly.

I think our Committee should be very concerned about that, as well, since we may have something to say about—not in the sense of rewarding an excellent job done, but looking forward to the enormity of the task in the future and having some ongoing activity here in the Federal Government that is focusing on this issue, and focused on it before it became a buzz word.

Given the importance of manufacturing in U.S. competitiveness, and you talked about computer integrated manufacturing and flexible manufacturing; we hear a lot of talk that manufacturing has retained the 20 to 25 percent share of GNP over five decades. It was the same in 1947 as it was 1984, and we are told that there is no industrialization on the one hand—a large group of economists and policy analysts have taken that position.

On the other hand, we see in our own Congressional Districts and all around the country, we see the disintegration of manufacturing, employment, and we see a whole lot of industries going offshore. We hear corporate executives say that we are never going to retain—those corporate executives who have invested very heavily offshore—say that the United States will not retain manufacturing in this country, and Claudine and I have been at sessions of the Business Education Forum where that was spoken publicly.

What is, on balance, your view of where we are in manufacturing, where we are going, are we deindustrializing, and should be worried if GNP percentage retains a similar number over five decades?

Dr. MERRIFIELD. Well, I think we focus too heavily on the declining industries and those that are restructuring, which fail to use advanced technology, or develop advancing technology themselves. Unfortunately, many of those will not survive and they will continue to throw people into the job market.

At the same time, we are creating many more jobs than we have people looking for them. The Department of Labor has pointed out, that there are 4 million jobs out there currently looking for people, unfilled of which only about 12 percent are minimum wage; over 50 percent are professional, technical, managerial. We have a basic skill shortage in this country. About four percent of our 6.7 percent unemployment is structural. It is not a job availability problem, it is a social problem; functional illiteracy, skill mismatch and so forth.

That is why we have to address that problem as a social problem. For the remaining 2.5 percent is the median unemployment period, now it is only eight to ten weeks. This doesn't mean to say that there are not pockets of unemployment where there have been heavy concentrations of the declining industries, but basically we have been creating many more jobs. The Europeans call it the American Miracle.

Europe has have lost jobs over the last 15 years, while we have created 25 million net new jobs. This is a remarkable thing, and it is primarily the climate for entrepreneurial activity that it is this House Science Committee has persistently created here, unique in the world, that has been responsible for this.

I think what we have to do is recognize the power of what we have done and continue to enhance the incentive for entrepreneurial activity and remove unnecessary barriers like anti-trust, regulations, and the high cost of capital which is a major barrier to both innovation and automation. These are the critical things we have to address and if we focus on these productivity-increasing things, like innovation, automation and reskilling, we can outrun anybody, any place, any time, and I am convinced of that.

I think we have unparalleled advantages over everybody else in the world. I keep saying this. We have this basic research that nobody else has the academic infrastructure to generate. We have the greatest depth and breadth of technical-industrial infrastructure which can translate new knowledge into useful things.

We have this entrepreneurial culture which is the only culture in the world that has permission to fail without personal or social penalty. We have the biggest pool of trained scientists and engineers in the world; the world's largest market with a common language.

We have everything, if we would just get our act together and provide the incentives and get the barriers out of the way. We can do it.

Mr. **Ritter**. My question is, are we losing manufacturing in this country?

Dr. **Merrifield**. The answer is no, we are not losing manufacturing. We are actually in a constant state of change, however, with life cycles collapsing to three to five years in electronics. There will be continuous evolution and devolution of new businesses and decline of others.

We are looking at change and the management of change, but manufacturing as a function of GNP, if anything, is probably rising, and will continue to rise, although we will lose jobs in manufacturing.

Mr. **Price**. Thank you. I recognize the gentleman from Louisiana, Mr. Hayes.

Mr. **Hayes**. They have questions that are printed in advance, none of which really apply to this extraordinary document, the statement of Dr. Caponio. This belongs in a logic class, not on preprinted questions on the question.

It starts off talking about NTIS, which all operating costs are funded from the sale of products. It is self-sustaining, it is very proud of the Japanese technical information; it is very proud of the Patent Licensing Program.

It concludes with a statement, and states very strongly, that the objective of NTIS to make results of Government-funded research development available to private sector should be maintained, and then in the middle—in the middle is a logical contradiction to all of that.

We are currently looking at several privatization options. That statement is revealing in that it doesn't even have a particular choice of privatization. What strikes me is we have a good program; it pays for itself, and we are going to privatize it even without knowing what manner we are going to privatize it, and the answer to that is in the first sentence, "Consistent with the Administration's privatization initiative.

What I suggest is, coming out of a State Government, budget initiatives do not fall well coming from top to bottom on certain programs.

I ran a banking department, where each one of my employees made money for the State Government. Under a funding cutback and under general cutbacks, we were told, let's get rid of three percent of the budget of each department, which in my case, cost the State of Louisiana, a great deal of money.

I have the strangest feeling that the reason specifics are lacking in this program is that the motivating force from budget has absolutely nothing to do with the aims of the National Technical Information Service.

Would you care to comment on that?

Dr. Caponio. You have articulated a point and I can only say, again, that we are committed to the privatization in one form or another.

Mr. Hayes. The point that I am making is, that is a good general option, and it is starting off as a philosophical concept and I think everyone on this Committee agrees that there are some things that private industry can do better. But what is lacking in this statement is why and how private industry does this task better.

I think that if you want to be advocate for that point of view, or if someone cares to advocate it, then they are going to go from general options to specifics and then come with weighing the two at an entirely different level.

Now I will jump over to an incredible document, and that is Dr. Merrifield's statement. It concludes, referring to the smaller OPTI staff, "But they will continue to function as the Department's focal point and advocate on policy matters."

Well, what is extraordinary about this is, I haven't heard an advocate yet for one of the programs, and I think there would be a great deal of value if we did have an advocate or someone who instead of saying let's cut it, said let's increase it. Because what we would learn from that advocate would be the weighing and evaluation process that seems to be missing by an automatic assumption that we should row towards privatization.

Where is the advocate that I can look at and say, that doesn't make any sense; that is wrong; it ought to be privatized?

Instead what I get is a document that begins with a conclusion, saying that we have made, with the Administration, a compromise so that we will have ten people at $675,000 who do what? Who do what? Who function as advocates and do all the things that we ought to be doing.

Well, is that too small a staff, or to large a staff to be doing what we ought to be doing? And if it is what we ought to be doing, then why are we talking about not doing it any more?

I have to go to another meeting. I know you are going to miss me. [General laughter.]

Thank you, Mr. Chairman.

Mr. PRICE. Thank you.

Miss SCHNEIDER. Mr. Chairman, may I ask your indulgence? Unless you have some questions, I just wanted to take a second to ask for an extension of an answer.

Mr. PRICE. Fine. We do need to move on to the next panel as quickly as we can.

Miss SCHNEIDER. Well, this is directed to Dr. Merrifield. You had mentioned three points that you felt were imperative for us to regain our competitiveness posture; stimulating our technology was the first one.

That is apple pie and motherhood. I wondered if you, as an individual, have a specific wish list that you are going to be carrying into the economic policy council meetings with specific recommendations, such as, export controls which I know the Commerce Department has been supportive of, intellectual property rights.

You talked in generic terms about removing barriers. The President mentioned in his package extending the R&D tax credits. Is this something that we can count on you to carry, extending R&D tax credits beyond the three-year limit, and maybe moving from 20 to 25 percent?

Dr. MERRIFIELD. Yes, indeed. In fact, if you like, we can supply you with a list of these things that we will be happy to do.

Miss SCHNEIDER. I have the list. But I just wanted to know what part of that list you personally were going to be pushing for. It is a huge laundry list, and I think we need some action quickly.

Dr. MERRIFIELD. There are a lot of initiatives that we need to go over; such as to strengthen the patent and copyright laws. I would like to see the incremental tax credit allowed for R&D limited partnerships, which is not allowed now. There are critical things in terms of regulatory barriers that are unnecessarily anti-competitive that we need to selectively address and so forth.

Miss SCHNEIDER. My only point is that I have gone to the White House a bunch of times, too, and I have a list of 43,000 things I would like to see done, but I usually narrow it down to three or five. I just wanted to get some kind of feel that you, as an individual, were going to hit on those things that this Committee has been essentially supporting which we see as specific barriers that can be removed.

The last part of my question is, I understand that you were recently negotiating with the Japanese, and I understand that those were rather frustrating in terms of equal access to technology.

Do you think that it is necessary because of your frustration on the negotiating level? What kind of action do you think the Congress can take that might have more of a wallop to it, or do you think that we ought to continue to enable you to proceed to negotiate for equal access. Or do we have to write that into some kind of requirement?

Dr. MERRIFIELD. I don't think we need to have any legislation. We have tremendous unutilized advantages here, both in the open access to our market that we supply, and also the open access to our basic technology.

These are leverage factors that we have not fully appreciated nor taken advantage of. We intend to do that. We are not going to renew that agreement until we get some very significant concessions, and performance guarantees, as well. In other words, it will be a reviewed process and they have to implement them.

For example, it takes them seven to ten years to issue one of our U.S. patents. Well, in the meantime they have access to the technology. That is not going to fly any longer. These are the kinds of things that we are going to be insisting on; collaborative efforts, win-win situations instead of a one-way street which it has been in the past.

They are not too happy about this, but they are very anxious for this agreement and I think we have the leverage there to take advantage of that.

Thank you.

Miss SCHNEIDER. Thank you.

Mr. PRICE. Mr. Boehlert.

Mr. BOEHLERT. Just one quick question, Dr. Merrifield. In your testimony on page 2, you talk about an OPTI Budget for Fiscal Year 1988 of $1.9 million. We were led to believe it was $2.2 million. Can you explain that difference?

Dr. MERRIFIELD. The difference, I think, is in partly the $450,000 that is for patent licensing activity in NTIS, and $300,000 or so in Office of Strategic Resources, which is in my budget but it is not articulated that way.

Mr. BOEHLERT. We are going to be submitting some written questions for answer. Could you clarify that when you respond to us?

Dr. MERRIFIELD. Indeed, thank you.

[The material referred to follows:]

3/10/87

ECONOMIC AND STATISTICAL ANALYSIS
Budget History - Office of Productivity, Technology, and Innovation (OPTI),
National Technical Information Service (NTIS), and Office of Strategic Resources (OSR)

Fiscal Year	ESA Total		OPTI		NTIS (S&E)		OSR		Total Productivity, Technology, and Innovation		NTIS (Trust)	
	Perm Pos.	Amount	Perm Pos.	Amount	Perm Pos.	Amount	Perm Pos.	Amount	Perm Pos.	Amount	Perm Pos.	Amount
FY 83 -												
President's Request......	708	$32,652	44	$2,592	0	$0	4	$222	48	$2,814	402	$27,400
Approved Budget..........	730	$36,832	59	$3,692	7	$2,880	5	$286	71	$6,858	390	$27,000
End of Year Employment..	654		43		12		5		60		307	
FY 84 -												
President's Request......	761	38,900	82	4,557	4	876	5	$304	91	$5,737	412	29,000
Approved Budget..........	784	38,337	82	4,494	5	495	5	$298	92	$5,287	407	29,000
End of Year Employment...	540		37		10		4		51		321	
FY 85 -												
President's Request......	624	31,622	49	2,461	9	910	0	$0	58	$3,371	384	31,000
Approved Budget..........	618	31,085	49	2,460	5	545	5	$317	59	$3,322	384	31,350
End of Year Employment...	531		29		5		5		39		310	
FY 86 -												
President's Request......	618	29,519	3	1,762	5	537	0	$229	8	$2,528	384	33,350
Approved (G-R-H level)...	618	29,188	49	2,014	5	513	5	$296	59	$2,823	384	35,000
End of Year Employment...	495		30		5		4		39		293	
FY 87 -												
President's Request......	567	31,005	3	1,510	5	443	0	$229	8	$2,182	379	36,639
Approved Budget..........	582	30,000	41	2,017	5	432	4	$303	50	$2,752	339	36,639
End of Year Employment...												
FY 88 -												
President's Request......	568	32,947	37	1,900	0	$0	2	$318	39	$2,218	344	36,400
Approved Budget..........												
End of Year Employment...												

Notes:

Includes the Office of Competitive Assessment (only through FY 1984; transferred to ITA 28 positions and $1,657,000 for FY 1985).

OPTI was transferred into the ESA account in FY 1982 with 13 positions and $700,000. NTIS was transferred into the ESA account in FY 1983.

The President's FY 1988 budget includes 39 permanent positions for the Productivity, Technology and Innovation program. It assumes a reduction in force (RIF) will be initiated in January 1988 in order to achieve the reduced level of twelve positions planned for FY 1989.

Mr. **Price**. Dr. Caponio, Dr. Merrifield, we appreciate your testimony. We will be asking you some further questions, and in the interest of time, we would like you to just submit the answers for the record, if you will.

Dr. **Merrifield**. Indeed.

Mr. **Price**. Thank you, very much for appearing before us.

We will call our next witnesses who will appear as a panel. Dr. Ellen Detlefsen, Associate Professor at the school of Library & Information Science, at the University of Pittsburgh; Mr. Robert Edgell, Government Procurement Specialist, with the American Federation of Government Employees; Mr. James Wyatt, the Director of the University of Rochester Libraries, Rochester, New York; and Dr. Harold Seidman, Chairman, National Academy of Public Administrations Panel on NTIS.

We welcome these witnesses here today, and we will ask them to testify in the order in which they were called.

STATEMENTS OF DR. ELLEN DETLEFSEN, ASSOCIATE PROFESSOR, SCHOOL OF LIBRARY & INFORMATION SCIENCE, UNIVERSITY OF PITTSBURGH; ROBERT EDGELL, GOVERNMENT PROCUREMENT SPECIALIST, AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES; JAMES F. WATT, DIRECTOR, UNIVERSITY OF ROCHESTER LIBRARIES; AND DR. HAROLD SEIDMAN, CHAIRMAN, NATIONAL ACADEMY OF PUBLIC ADMINISTRATION—PANEL ON NTIS

Mr. **Price**. As you know, practice on the Subcommittee is to ask you to submit your full statement and any other material you wish for the record; in oral testimony, to summarize your statement.

We appreciate your appearing before us today, contributing to our deliberations on the NTIS, the privatization proposal.

We will first hear from Dr. Detlefsen.

Dr. **Detlefsen**. Thank you, Mr. Chairperson. I have a short oral summary. I have a lengthier statement, which you have already received.

I am Ellen Gay Detlefsen, from the School of Library and Information Science at the University of Pittsburgh, and I am here today for the American Library Association and the Medical Library Association, both of which are non-profit educational organizations with a combined membership of nearly 50,000 librarians and institutions, all of whom are concerned about timely and affordable access to scientific and technical information and in particular, the work of the NTIS.

I do appreciate this opportunity to talk to you about the NTIS and the current efforts to change both its structure and services. Without affordable access to the materials available from NTIS, materials which I remind you were produced with public funds, scientific and social-scientific research and small business in this country will be retarded and the proverbial wheel reinvented countless times over.

The NTIS is a nerve center for information access and it has a very proud history of providing information efficiently and at no net cost to the taxpayer. It is that tradition and service that are threatened by the current OMB proposals to privatize or contract out the NTIS by 1988.

The American Library Association has taken an official stand opposing the privatization or contracting out of NTIS. Last January, its membership and governing council resolved that, and I quote, "Contracting out or privatization of NTIS could adversely affect ready access to scientific and technical information crucial to the competitive position to the United States in the world economy and to the security of the Nation."

That resolution also called on Congress, specifically, to "pass legislation to assure that the interests of the American public would not be vitiated should OMB proceed with its plan to contract out or privatize NTIS."

The Medical Library Association, through its National Governmental Relations Committee, on which I sit, is likewise opposed to the proposed changes in NTIS.

There is a great deal of additional input from librarians, information specialists and their clients, whether scientists or small businessmen, in the body of public comment that was gathered in response to a Department of Commerce notice in the Federal Register last April.

I am also submitting for the hearing record ALA's June 6th, 1986 letter, which expresses our concerns about the privatization of NTIS in much more detail than I can discuss this morning.

Librarians and information specialists have been concerned for more than a year that this flagship sector of the Government, scientific and technical information effort is threatened. In the February-March 1987 issue of Technology Review, a journal published by the Massachusetts Institute of Technology, a number of scientific and technical librarians and information managers continued to argue that changes in the NTIS will lead to diminished access and to an overall loss of information for many in the scientific and social-scientific and small business communities.

These are researchers, scientists and small business entrepreneurs who may be from your districts, as those in the Oakland area of Pittsburgh, or Riverside and San Jose, California, the Raleigh-Durham Triangle Park Area, Champaign/Urbana, Illinois, the Providence/Boston/New England region, and the Allentown/Bethlehem/Easton/Route 22 corridor.

I am submitting a copy of that MIT article for the record.

We have four major issues of concern. One is the process by which OMB is riding roughshod over the recommendations of the Department of Commerce for potential change in the NTIS; two, the continuance of timely and affordable access to both the archival and the current materials in the NTIS system; three, the potential international problems that may arise from privatization and contracting out; and four, the importance of NTIS as a unified whole.

First, OMB's apparently willful disregard of Government process. In 1986, OMB requested Commerce to review the alternatives for privatizing NTIS. The Department of Commerce Interdepartmental Task Force requested public comment, held hearings and met privately to make the recommendations, all of which seemed to have been totally ignored by the OMB.

The Ranking Minority Member has already effectively quoted from portions of this document, which I think can be characterized as a smoking gun.

It is clear that OMB completely ignored the proposal which used a process that encouraged participation by Government agencies, participation by NTIS customers, and participation by companies in the information industry.

I have a copy of the document which I would like to enter into the hearing record.

Since receiving the report, OMB has arbitrarily disregarded the costs and risks which privatization presents. It is particularly ironic that privatizing NTIS would apparently not even further the OMB's presumed goal of reducing the Federal budget deficit. That report, in its Executive Summary, points out, "Discontinuing any significant portion of the NTIS program will increase, rather than decrease, Federal appropriations."

Secondly, the scholarly and scientific communities served by libraries and information science centers rely on NTIS to make available at an affordable price not only the reports from current and ongoing research, but also materials that emanated from research efforts funded with Federal money in the past.

Privatization or contracting out the NTIS will jeopardize this archival function and inevitably result in higher costs to researchers for the information upon which they rely.

Lesser-used titles are still an important resource in research. The absence of access to them may result in unnecessary duplication of research efforts in the future. If a privatized or contracted out NTIS is to succeed, then prices will increase, further endangering the public access to materials which resulted from publicly funded research.

The third concern is two international issues. On the one hand, about 25 percent of the NTIS titles have entered that system as the result of bilateral agreements with foreign governments. Any proposed privatization or contracting out of NTIS activity threatens the more than 100 such agreements which now exist. It is doubtful that foreign governments and agencies would be willing to enter into these arrangements with a private sector organization.

The result of the loss of such arrangements would be additionally diminished access to useful scientific information.

On the other hand, the Department of Commerce report which I mentioned earlier, points out the risk of the potential control of NTIS by foreign interests, a risk apparently ignored by OMB.

We find it incongruous that the Administration is trying to restrict foreign access to unclassified scientific, technological and economic data bases at the same time that it is trying to turn over the Government scientific and technical information to private contractors who may be controlled by foreign interests or can be bought by foreign firms.

In one example, a wholly-owned subsidiary of a Dutch company appears to be the successful bidder on the contract to operate the Library and Information Service Division of the National Oceanic and Atmospheric Administration.

In January, the ALA's Governing Council also passed a resolution urging Congress to declare a moratorium on all contracting out of Federal libraries and document depositories, and to hold further hearings on this matter.

I am submitting a copy of that resolution for the hearing record.

In another example, a well-known information industry company, a data-base vendor, has apparently dropped the NTIS data base from its stable because of Department of Defense requests to have them identify their customers who are using certain "sensitive" information resources.

Again, it appears that the Administration's right hand does not seem to know what its left hand is doing.

Finally, it is the notion of the NTIS as a single source that is important. Contemporary researchers, information specialists, libraries and their clients view the ability to identify, locate and acquire technical and scientific reports from one efficient source as extremely valuable.

To require that these individuals and institutions go to a multiplicity of sources that may result from contracting out or privatization, will waste both time and money, time and money that may be in fact Federally funded because of research grants.

There is room for both a unified NTIS and an information industry which uses the NTIS as a source for its own specialized products. The NTIS must not be broken up.

Privatization for the sake of privatization, contracting out for ideological rather than practical reasons, will lead only to the dismemberment of an efficient, self-supporting and highly regarded information agency.

The future of NTIS should be seen as one in which its present operations are strengthened, not divided. Librarians and information specialists everywhere support the retention of an efficient, self-supporting Federal agency to control the collection, organization and dissemination of these materials as they are now done by and through the National Technical Information Service.

The centralized source, the permanent repository, the provision of bibliographic access through the depository library programs, the operation of a timely sales program at prices affordable for not-for-profit users are important facets of the current NTIS service. They must be maintained.

ALA and MLA urge Congress to consider very carefully any proposals which would result in diminished access, higher prices, or lower standards of services for these materials, and if necessary, to pass legislation designed to assure the interests of the American public and the vital functions of the NTIS not be lost should OMB proceed with its plan to contract or privatize NTIS.

Further, we urge Congress to declare the moratorium on all contracting out of Federal libraries, document depositories and information services.

Thank you for the opportunity to testify on behalf of the American Library Association and the Medical Library Association.

[The prepared statement of Dr. Ellen Detlefsen plus additional information referred to follows:]

Statement of

Ellen Gay Detlefsen
Associate Professor, School of Library and Information Science
University of Pittsburgh

before the
Subcommittee on Science, Research, and Technology
of the
House Committee on Science and Technology

on the
Proposed Privatization of the National Technical Information Service

March 4, 1987

My name is Ellen Gay Detlefsen. I am an Associate Professor in the School of Library and Information Science at the University of Pittsburgh. I am speaking today on behalf of the American Library Association and the Medical Library Association. These two groups are nonprofit educational organizations; the ALA has a membership of nearly 44,000 librarians, library trustees, educators and friends of libraries, while the MLA, with a membership of 5,000, represents the specialized interests of those who work with health science and biomedical information. On behalf of nearly 50,000 librarians and institutions that represent the broadest range of information services from traditional libraries to high technology information entrepreneurs, I appreciate the opportunity to talk with you about the National Technical Information Service, and current efforts to change its structure and services.

The NTIS and Its Services

The NTIS is a self-supporting agency housed administratively in the Department of Commerce which successfully provides the public and business community with access to government-sponsored research reports on a wide range of topics. The materials housed and serviced by the NTIS staff represent a better-than-forty-year heritage of information that, in the main, is unavailable elsewhere. These materials are indispensable for scientists, social scientists, policy makers, students, entrepreneurs and other citizens who depend upon the NTIS research base for the information to support their own research and enterprise. The information contained in the millions of NTIS reports ranges from life-and-death studies in biomedical research to new inventions, from reference bibliographies to foreign language documents, from clean water studies to space safety reports, from urban land planning to irrigation research, from computer languages to foreign translations, from book-length studies to databases on magnetic tape. Without low-cost access to these materials produced with public funds, scientific and social science research in this country would be retarded, and the proverbial wheel reinvented countless times over. The NTIS, a successor agency to one Congressionally-mandated just after the conclusion of World War II, serves as a nerve center for information access, and has a proud history of providing information efficiently and at no net cost to taxpayers. It is this tradition and service that are threatened by current Office of Management and Budget proposals to privatize or contract out the NTIS by 1988.

The ALA and MLA Positions

The American Library Association has taken an official stand opposing the privatization or contracting out of NTIS. A resolution passed by ALA's Council in January 1987 is attached to this testimony. The resolution states that "contracting out or privatization of NTIS could adversely affect equal and ready access to scientific and technical information crucial to the competitive position of the U. S. in the world economy and to the security of the nation." The resolution calls on Congress to "pass legislation...to assure that the interests of the American public...will not be vitiated should OMB proceed with its plan to contract out or privatize NTIS." ALA has expressed its concerns regarding the maintenance of the vital functions currently performed by NTIS, namely: a) provision of a centralized source and permanent repository for a broad range of federal, international, state, local, and other unclassified scientific and technical reports; b) provision of bibliographic access to the material through tools such as NTIS' Government Reports Announcements and Index; c) dissemination of bibliographic information products of such a repository, i.e., catalogs, indexes, abstracts, and newsletters, through the Government Printing Office's Depository Library Program; d) operation of a timely, "on demand" sales program for this scientific and technical information at prices affordable for not-for-profit libraries, educational institutions, students, small business entrepreneurs, and other similar groups.

The Medical Library Association, through its Governmental Relations Committee, is likewise opposed to the proposed changes in NTIS. Additional input from librarians, information specialists and their clients is available in the large body of public comment gathered in response to a Department of Commerce notice in the Federal Register of April 28, 1986, requesting reaction to various alternatives proposed for the privatization of NTIS. I am submitting for the hearing record ALA's June 6, 1986, letter which expresses our concerns about the privatization of NTIS in more detail than I can discuss today. The attitudes of librarians and information specialists have not changed in the ensuing year; if anything, their concern that the flagship sector of the government's scientific and technical information effort is threatened have been heightened. Just this month, in the February-March 1987 issue of Technology Review, a journal published by the Massachusetts Institute of Technology (MIT), a number of noted scientific librarians and information managers reasserted their concern that changes in the NTIS would lead to diminished access for scientific information, and to an overall loss of information for many in the scientific and social science research communities. The concerns raised by these information leaders and by librarians of all specialities center on three issues: (1) access to the archive of NTIS reports, the government's corporate memory for scientific and technical literature; (2) access to foreign reports placed in the NTIS system as a result of agreements between NTIS and foreign governments; and (3) maintenance of the NTIS services as an organized and efficient whole and at prices affordable for not-for-profit users.

The Archival Function of NTIS

The scholarly and scientific communities served by libraries and information centers rely on NTIS to make available not only the reports from current and on-going research, but also materials that emanated from research efforts funded with federal money in the past. Efforts to privatize or contract out the NTIS dissemination efforts will place this archival function in jeopardy. Many of these older reports, as is the case with some new reports, will not be in great demand and will not move quickly enough to generate a profit, yet access to them must be maintained. For example, during the late 1970s, when there was an energy crisis, there was an interest in a number of long dormant studies on the use of ethanol as fuel. Lesser used titles are still an important resource in research; the absence of access to them may result in unnecessary duplication of research efforts in the future.

Access to Foreign Technical Reports

About 25 percent of the NTIS holdings are titles that have entered the NTIS system as the result of bilateral agreements between the agency and foreign governments or foreign government agencies. Recent agreements have led to the increased inclusion of materials from the Japanese Information

Center on Science and Technology (JICST), the Institute of Scientific and Technical Information of China (ISTIC), and West Germany's Fachinformationszentrum Energie Physik Mathematick (FIZ-4) and the Hannover Technischeinformationsbibliotek, for example. The proposed privatization or contracting out of NTIS activity threatens the ability to negotiate and conclude these important international agreements and deposit arrangements. More than 100 such agreements now exist, serving to ensure that the NTIS mandate to enhance commerce and improve productivity in U. S. business and industry is carried out. It is doubtful that these foreign governments and agencies would be as willing to enter these arrangements with a private-sector organization; the result of the loss of such arrangements would be additionally diminished access to useful scientific information.

NTIS as a Unified Whole

The NTIS has been described by one librarian as "the most important single source for public access, development, planning, and analytical studies." It is the notion of a single source that is most important; contemporary researchers, information specialists, and libraries view the ability to identify, locate, and acquire technical and scientific reports from one efficient source as extremely valuable. Time and energy are vital resources to these individuals and institutions; to require that they go to the variety of sources that may result from contracting out or privatization will waste both time and money.

The generation of a single bibliographic source---the NTIS database---is similarly an important NTIS function that saves the time and money of its users. Any move towards multiple bibliographic sources from several contractors or private sector firms will create an unnecessary financial and temporal burden for researchers, for those who are awarded Federal grants, and for the libraries and information centers who serve these people. The private sector already has the ability to use NTIS products and services, to repackage the NTIS materials in ways which can generate a profit for them, and to do for this technical information what it has already done quite capably for legislative information. There is room for both a unified NTIS and an information industry which uses the NTIS as a source for its own specialized products.

The overall scope of the NTIS is, in its own words, "a cornerstone of the technological publishing structure in the United States," and "the central source for the public sale of U.S. Government-sponsored research, development, and engineering reports, as well as foreign technical reports and other analyses prepared by national and local government agencies, their contractors, or grantees." It must not be broken up. We believe that claims that NTIS is a monopoly which should be dismantled are misleading since NTIS is a secondary distributor of government information, with the originating agencies making a primary distribution. Privatization for the sake of privatization, and contracting-out for ideological rather than logical reasons, will lead only to the dismemberment of an efficient, self-supporting, and highly regarded information agency.

OMB Privatization Initiative

Last year, at the behest of the Office of Management and Budget, the Department of Commerce reviewed a number of alternatives for privatizing NTIS. The April Federal Register notice prompted 138 responses. The consensus of the numerous comments from librarians was "If it isn't broken, don't fix it." An open meeting held at the Department of Commerce at the end of July 1986 was attended by about 100 people, many of them from the library community, again expressing their grave concerns about privatizing or contracting out NTIS.

After the public meeting, the process went behind closed doors as the Commerce Privatization Task force analyzed comments, developed alternatives, and made its recommendations to the Department of Commerce, which in turn presented its privatization proposal for NTIS to the Office of Management and Budget. OMB's decision for the future of NTIS was announced in one sentence in the Appendix to the Budget for fiscal 1988: "In 1988, the private sector will be offered the opportunity to operate NTIS on contract, with the government retaining overall policy direction."

We have a copy of the Department of Commerce's privatization proposal to submit for the hearing record. A reading of this document makes it clear that OMB ignored the results of the review process which encouraged participation by government agencies, NTIS customers, and companies in the information industry. Three paragraphs in the executive summary to the Department of Commerce Privatization Proposal for the National Technical Information Service are revealing:

> Given a program so complex and so privatized, any decision to make further privatization moves must be supported by evidence of extensive benefit and minimal cost. Such evidence does not exist. In fact, as this report clearly demonstrates, the evidence is that extensive privatization presents substantial costs and risks for the government, for NTIS customers and for the information industry as a whole.
>
> Given the impetus for this study, the governmental costs and risks must be of major interest. These clearly include monetary costs, since discontinuing any significant portion of the NTIS program will increase rather than decrease Federal appropriations. More important, however, are the policy costs and risks, those associated with U.S. competitiveness, national security, technology transfer, intellectual property rights and the availability of scientific and technical information.
>
> Conversely, there is little evidence to show that extensive privatization will provide tangible benefit for NTIS customers or for government's privatization goals. There appears to be some benefit for the information industry, but it is questionable whether this is a net benefit or simply a redistribution of the current benefit level among firms in the industry.

The American Library Association thinks that OMB has shown an arbitrary disregard for the costs and risks which privatization presents for the government, NTIS users and for the information industry as a whole. It is clear from the Commerce proposal that the benefits of privatization are minimal; the costs and risks are substantial. It is particularly ironic that privatizing NTIS would not even further OMB's presumed goal of reducing the deficit since as the report points out, discontinuing any significant portion of the NTIS program will increase the need for federal funds rather than decrease appropriations.

The Commerce privatization proposal points out the risk of the potential control of NTIS by foreign interests, a risk apparently ignored by OMB. On page nine the report states:

> While the Task Force does not wish to appear unduly alarmist on the issues of foreign control and foreign access, it notes that these issues were of major concern both to the Task Force members as well as to the Federal Agencies who responded to the Federal Register notice.

ALA finds it incongruous that the Administration is trying to restrict foreign access to unclassified scientific, technological and economic databases through National Telecommunications and Information Systems Security Policy (NTISSP) No. 2, "National Policy on Protection of Sensitive, But Unclassified Information in Federal Government Telecommunications and Automated Information Systems" (29 October 1986), and at the same time plans to turn over the government's scientific and technical information to private contractors which may be controlled by foreign interests or can be bought by foreign firms. This issue has been of concern to the Association for several years as we recognized the threat to national security inherent in the contracting out of federal libraries to American subsidiaries of foreign firms. As a matter of fact, a wholly owned subsidiary of a Dutch company appears to be the successful bidder on the contract to operate the Library and

Information Services Division of the National Oceanic and Atmospheric Administration in Rockville, Maryland, one of the government's major scientific and technical libraries. It should be noted that libraries within federal agencies are the agency access point to precisely those external databases the Administration is trying to shield from foreign access, and that if federal libraries are to perform the basic function for which they exist they must have access to internal agency databases as well. ALA believes the Administration's position on this issue is untenable. Accordingly, in January 1987 ALA's Council passed a resolution urging Congress to declare a moratorium on all contracting out of federal libraries and document depositories and to hold further hearings on this matter. A copy of the resolution is attached to this statement.

Concerns have also been expressed by social science researchers about foreign control of American information services. A recent report form the Social Science Research Council, Points of Leverage: An Agenda for a National Foundation for International Studies by Richard D. Lambert (New York, 1986) observes: "Yet we are almost absentmindedly allowing foreign concerns to gain control of some of the most important U.S.-based information services in the natural sciences;..." A few pages later the report states:

> There is a growing concern about the purchase by foreign firms of major American scientific information and distribution systems, which let them have immediate access to the products of our high-technology research without worrying about export restrictions.

The current problems facing the Landsat program are indicative of what can happen to important government programs as a result of privatization. An article in the February 23, 1987, Washington Post, "Fund Battle Imperils U.S. Space Photos," detailed the financial crisis which has beset the Landsat program since it was turned over to a private contractor. The president of the company which now operates Landsat said, "Here is something else the U.S.

has gone and invested $1 billion in, and it appears it is going to be handed over to foreign governments....That is a waste of taxpayers' money to me." The article says that without more federal funding, Landsat's existing market of 12,000 users throughout the world will shift to a year-old European competitor:

> Because of funding problems, observers say, the satellite program is on the verge of extinction. Industry executives, legislators and customers say that new European competitors are threatening to snare the lion's share of future business, which is expected to produce $2 billion in revenue by the turn of the century.

Will we be discussing a similar crisis of a privatized, contractor-operated NTIS in the future?

Since this subcommittee has jurisdiction over the National Bureau of Standards, I would like to point out another reason why Congress should reject OMB's privatization initiative. NTIS furnishes, among other things, a software clearinghouse and database support for agencies of the federal government as well as the nonfederal scientific and technical community. One of the agencies which receives direct, interactive database support from NTIS is the National Bureau of Standards. What happens to the security of NBS records if NTIS is contracted out to a foreign-owned firm?

The Future of the NTIS

We believe that a review of the law establishing NTIS and its legislative history will show that the clearinghouse responsibilities of NTIS were intended to be a function of the government within the Department of Commerce. The future of NTIS should be seen as one in which its present operations are strengthened, not divided. Librarians and information specialists everywhere support the retention of an efficient, self-supporting federal agency to continue the collection, organization, control, and dissemination of these materials by and through the National Technical Information Service. The centralized source, the permanent repository, the provision of bibliographic access through the Depository Library Program of the Government Printing Office, and the operation of a timely sales program at prices affordable for not-for-profit users are important facets of the current NTIS program of service which should be continued.

NTIS has provided the information industry, researchers, and the public with a single point from which it can identify and obtain scientific, technical and engineering information which fulfills their needs. Without any restrictions on its use, private organizations have been able to extract and add value to this information to best serve the changing needs of their customers. Any reconfiguration of the means by which NTIS provides access to government information could alter this benefit to the private sector.

ALA and MLA urge Congress to consider very carefully any proposals which would result in diminished access, higher prices or lower standards of service for these materials, and, if necessary, to pass legislation designed to assure that the interests of the American public and the vital functions which we identified earlier will not be vitiated should OMB proceed with its plan to contract out or privatize NTIS. Indeed, because of the risk to the nation's security and international competitiveness, we urge Congress to declare a moratorium on all contracting out of federal libraries and document depositories.

Thank you for the opportunity to testify on behalf of the American Library Association and the Medical Library Association.

Attachments

Resolution Concerning OMB's Proposed Privatization of NTIS

WHEREAS, The Office of Management and Budget (OMB) proposes to contract out or privatize the National Technical Information Service (NTIS); and

WHEREAS, Strong objections have been submitted to NTIS and OMB by the American Library Association, other professional library and information science associations, the academic and research community, individuals, and private sector organizations requiring rapid, economical access to scientific and technical information collected or generated with U. S. tax dollars; and

WHEREAS, ALA has expressed its concerns regarding the maintenance of the vital functions currently performed by NTIS, namely:

a) provision of a centralized source and permanent repository for a broad range of federal, international, state, local, and other unclassified scientific and technical reports;

b) provision of bibliographic access to the material through tools such as NTIS' Government Reports Announcements and Index;

c) dissemination of bibliographic information products of such a repository, i.e., catalogs, indexes, abstracts, and newsletters, through the Government Printing Office's Depository Library Program;

d) operation of a timely, "on demand" sales program for this scientific and technical information at prices affordable for not-for-profit libraries, educational institutions, students, small business entrepreneurs, and other similar groups; and

WHEREAS, Such contracting out or privatization of NTIS would adversely affect equal and ready access to scientific and technical information crucial to the competitive position of the U. S. in the world economy, and to the security of the nation; and

WHEREAS, The Office of Management and Budget has not responded publicly to these concerns; now, therefore, be it

RESOLVED, That the American Library Association calls upon the Congress of the United States to hold hearings on OMB's proposal and, if necessary, draft and pass legislation designed to assure that the interests of the American public and the functions identified above will not be vitiated should OMB proceed with its plan to contract out or privatize NTIS; and, be it further

RESOLVED, That copies of the Resolution be transmitted to the President of the Senate, the Speaker of the House of Representatives, appropriate committees of Congress, the Secretary of Commerce, the Director of the National Technical Information Service, and the Director of the Office of Management and Budget.

Adopted by the Council of the
American Library Association
Chicago, Illinois
January 21, 1987
(Council Document #26.6)

Resolution on Foreign Control of Federal Libraries and Document Depositories

WHEREAS, The information resources of the federal government are vital to the security and economic well being of the United States; and

WHEREAS, Federal libraries and document depositories provide crucial support and unique resources for the development of policies, implementation of programs and ongoing operations of government agencies; and

WHEREAS, Federal libraries and librarians are key to effective utilization of these information resources, performing an inherently governmental function; and

WHEREAS, Federal libraries provide the longitudinal corporate memory of their agencies and their staffs, perform agency evaluations and actions under the Freedom of Information and Privacy Acts; and

WHEREAS, The American Library Association has opposed contracting out of federal libraries; and

WHEREAS, The Administration has expressed its concern regarding the sensitivity of certain types of federal information; and

WHEREAS, This Administration is using Office of Management and Budget Circular A-76 to force the contacting out to organizations outside the federal government of the information services provided by federal libraries and document depositories; and

WHEREAS, Circular A-76 does not restrict contracting for federal library and depository services only to United States firms and organizations; and

WHEREAS, At least one major departmental library and key functions in other federal libraries are already contracted out to U. S. subsidiaries of foreign firms; and

WHEREAS, It has been announced that a foreign owned firm is to be the successful bidder on another A-76 action which would allow this firm to take over the operation of a major scientific library in the federal government; now, therefore, be it

RESOLVED, That the American Library Association believes it is not in the best interest of the American people to contract out federal information programs and organizations to foreign owned or controlled firms; and, be it further

RESOLVED, That the American Library Association urge the Congress of the United States to declare a moratorium on all contracting out of federal libraries and document depositories and to hold further hearings on this matter; and, be it further

RESOLVED, That copies of this Resolution be transmitted to the President of the United States and his National Security Adviser, the President of the Senate, the Speaker of the House of Representatives, appropriate committees of the Congress, and the Director of the Office of Management and Budget.

Adopted by the Council of the
American Library Association
Chicago, Illinois
January 21, 1987
(Council Document #26.7)

ELLEN GAY DETLEFSEN

Biographical Sketch

Ellen Gay Detlefsen is an **Associate Professor** in the **School of Library and Information Science** at the **University of Pittsburgh.** She was educated at Smith College and Columbia University, and holds her doctorate from the Columbia University School of Library Service.

Her areas of expertise and teaching competence include **government information, bio-medical and health sciences information,** and the **management of special libraries and specialized information centers.** She is also a specialist in the history of books, printing, publishing, and information technology.

She is an active member of the **American Library Association,** the **Medical Library Association,** and the Association for Library and Information Science Education. She serves on national and regional committees and commissions that are concerned with governmental relations, education for the information professions, and specialized information resources and services.

Recent articles by Dr. Detlefsen include **"Government Publications: An Access Perspective," "User Costs: Information as a Social Good versus Information as a Commodity",** and **"Education for Health Sciences/Biomedical Librarianship: Past, Present, Future"** She regularly does workshops on accessing government information for health sciences information specialists and frequently speaks on the impact of new technology on traditional information practice.

A native of Louisiana, who was raised in Virginia, Dr. Detlefsen now resides in Pittsburgh, Pennsylvania, with her spouse, a physician specializing in sleep medicine and geriatrics, and her two sons.

Resolution Concerning OMB's Proposed Privatization of NTIS

WHEREAS, The Office of Management and Budget (OMB) proposes to contract out or privatize the National Technical Information Service (NTIS); and

WHEREAS, Strong objections have been submitted to NTIS and OMB by the American Library Association, other professional library and information science associations, the academic and research community, individuals, and private sector organizations requiring rapid, economical access to scientific and technical information collected or generated with U. S. tax dollars; and

WHEREAS, ALA has expressed its concerns regarding the maintenance of the vital functions currently performed by NTIS, namely:

a) provision of a centralized source and permanent repository for a broad range of federal, international, state, local, and other unclassified scientific and technical reports;

b) provision of bibliographic access to the material through tools such as NTIS' Government Reports Announcements and Index;

c) dissemination of bibliographic information products of such a repository, i.e., catalogs, indexes, abstracts, and newsletters, through the Government Printing Office's Depository Library Program;

d) operation of a timely, "on demand" sales program for this scientific and technical information at prices affordable for not-for-profit libraries, educational institutions, students, small business entrepreneurs, and other similar groups; and

WHEREAS, Such contracting out or privatization of NTIS would adversely affect equal and ready access to scientific and technical information crucial to the competitive position of the U. S. in the world economy, and to the security of the nation; and

WHEREAS, The Office of Management and Budget has not responded publicly to these concerns; now, therefore, be it

RESOLVED, That the American Library Association calls upon the Congress of the United States to hold hearings on OMB's proposal and, if necessary, draft and pass legislation designed to assure that the interests of the American public and the functions identified above will not be vitiated should OMB proceed with its plan to contract out or privatize NTIS; and, be it further

RESOLVED, That copies of the Resolution be transmitted to the President of the Senate, the Speaker of the House of Representatives, appropriate committees of Congress, the Secretary of Commerce, the Director of the National Technical Information Service, and the Director of the Office of Management and Budget.

Adopted by the Council of the
American Library Association
Chicago, Illinois
January 21, 1987
(Council Document #26.6)

Technology Review (MIT)
February-March 1987

Privatizing Tech Info

In April 1986, the Commerce Department announced that it was considering privatizing the National Technical Information Service (NTIS). From New England and California the word came back: "If it ain't broke, don't fix it."

NTIS is currently the primary distributor of government research reports, including reports prepared under contract to government agencies. NTIS also disseminates foreign research reports as part of formal exchange agreements. Practically every technical library uses NTIS regularly, as do many individuals and companies.

Rarely has a *Federal Register* notice provoked such passion among librarians. "I was absolutely shocked," wrote a health-sciences librarian from New England. "It is frightening to think that 'the government' is made up of individuals who have lost sight of the public good and have let economic pressures destroy reservoirs of knowledge," said a Texas librarian. And from a librarian at General Electric Space Systems Division came: "I cannot for the life of me see why an organization that is doing a great job, is self-supporting, and is very much needed by the private sector, government, and scholars should be the target for emasculation."

The proposal to privatize NTIS stems in part from the Reagan administration's expressed desire to reduce the size of federal government and limit competition between the public and private sectors. The Commerce Department study, made at the request of the Office of Management and Budget (OMB), considered about a dozen alternatives. Among them are discontinuing NTIS and allowing individual businesses to pick up selected functions; selling all or part of NTIS to one or more private organizations; and establishing NTIS as a government or nonprofit corporation.

However, almost all users feel strongly that the current system works well. NTIS calls its collection—with more than 1.6 million titles—"a cornerstone of the technological publishing structure in the United States."

NTIS supplies more than 6 million documents and microforms to customers each year and ships an average of 24,000 a day. All reports are available in both hard copy and microfilm. Abstracts and indexes for NTIS reports are available in several subscription formats, including electronic data bases.

The entire operation, which employs 350 people, is almost completely supported by sales of its products and services. Congress appropriates only about $500,000 each year, solely to fund a special patent program housed within NTIS. One of the ironies of privatization, therefore, is that selling the service would do practically nothing to reduce the federal deficit.

Tampering with NTIS—particularly carving up its products and services and selling them to the highest bidders—creates nightmares among librarians. "The thought of having to deal with multiple organizations in order to obtain technical reports is foreboding," wrote M.I.T. director of libraries Jay Lucker. Librarians are especially concerned that it may become impossible to order obscure government reports, such as those from agencies that are no longer in existence.

Government Monopoly?

The Information Industry Association (IIA), representing over 450 companies, welcomes the privatization proposal because it would prevent any government "monopoly of information services and products." Kenneth B. Allen, the association's vice-president for government relations, believes that the government should "encourage and preserve" a diversity of information sources. Such

ILLUSTRATION: JON McINTOSH

diversity could enhance efficient access to government research products, he says. "At the time the NTIS was established, a vigorous and healthy private-sector information industry did not exist. Today, that industry is a major force in our society."

IIA also suggests that competition among private companies users would promote broader use of government information products and services. This would generate a greater financial return to the government. But whether competition would reduce prices is another question. Librarians argue that government should continue to facilitate low-cost access to information that is produced with public funds.

Government officials, industry representatives, and librarians looked at privatization alternatives in a Commerce Department workshop this past July. A department task force subsequently developed recommendations for Commerce Secretary Malcolm Baldrige. His decision will go to OMB in time to be considered for the 1988 budget, the first year privatization could take place.

Many observers believe that the most likely outcome of the privatization proposal will be a government-chartered nonprofit corporation, along the lines of COMSAT or the St. Lawrence Seaway Corporation. According to Donald Lindberg, director of the National Library of Medicine, such a corporation is "the only major alternative worth serious consideration." It would permit NTIS to "function as a private enterprise while protecting the people's right to access scientific and technical information of the government."—*Rosemary Chalk*

Computer graphics for television news give designers fresh opportunities to experiment.

The Changing Face of News Graphics

Election results integrated with pictures of candidates. Maps and charts of economic indicators with information in legible type. Animated pairs of RNA. New technology is helping television news artists create these graphics daily.

The images are increasingly dynamic, with enhanced color and special effects. "The technology has not changed reporting, but has made visuals more understandable," says David Bucksbaum, vice-president of news coverage and operations at CBS in New York.

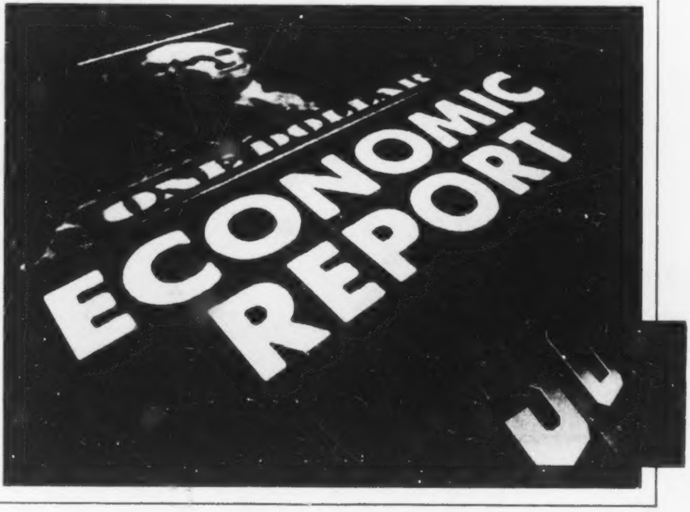
The new graphics systems use computers to store symbols, art, and type as digital information that can be translated into patterns of dots on a television screen. The images can be called up when needed and manipulated with the press of a key.

The simplest device is the character generator, which creates text and symbols and overlays them onto the screen image. The character generator offers many styles and sizes of type, and can introduce outlines, shadows, and even three-dimensional type.

Electronic still storage (ESS) devices store a collection of graphics and type styles that artists can retrieve. Four years ago ESS was the cutting edge of TV technology, but today it is standard equipment. This tool is, in effect, an electronic slide projector. "Graphics in ESS are recorded digitally as slide files of from 200 to 1,000 images, and then played back as video," explains Allen Foster, executive producer of the Ten O'Clock News at Boston's WGBH-TV. "In traditional graphics, transparencies are projected on a screen and the image is recorded by a TV camera."

ESS allows artists to combine several images. On the day of a bombing, a designer can retrieve a stored map of the bombed city and combine it with stored symbols of an explosion. Superimposed type can tell viewers the name of the city or the number of deaths.

ESS is replacing the craft of creating new graphics. But artists are still under intense pressure to produce fresh ideas quickly. For instance, NBC News in New York requires an average of 25 graphics per broadcast. As a



GRAPHICS: D. JONASON, M. TRUDELL, W. NG/ABC NEWS

WASHINGTON OFFICE

AMERICAN LIBRARY ASSOCIATION

BOX 54 • 110 MARYLAND AVENUE, N.E. • WASHINGTON, D.C. 20002 • (202) 547-4440

June 6, 1986

Dr. D. Bruce Merrifield
Assistant Secretary for
Productivity, Technology & Innovation
c/o Dr. Joseph Clark
Room 4824
U.S. Department of Commerce
Washington, D.C. 20230

Dear Dr. Merrifield:

This letter is submitted on behalf of the American Library Association (ALA) in response to the request for comments on "Productivity, Technology, and Innovation; Study of Alternatives for Privatizing the National Technical Information Service" which was published in the April 28, 1986 Federal Register, pp. 15868-15870. ALA, a nonprofit educational organization of more than 42,000 librarians, trustees, educators, information specialists and other friends of libraries, has always taken an active interest in the library and information activities of the federal government because of our intimate knowledge of the usefulness and crucial importance of government information, as well as our belief that citizens should have equal and ready access to unclassified information of public interest or educational value.

For more than 35 years, the National Technical Information Service (NTIS) and its predecessor organizations have had as their mission the centralized collection, announcement, and dissemination of United States government-sponsored research and development reports and translations of foreign technical literature. This mission is no less important today than when the government assumed it. The American Library Association opposes any action by the Department of Commerce which would impair this mission. NTIS is an investment essential for the United States to ensure the strength and capability of its national defense, international competitiveness, and economic growth.

ALA believes that NTIS should continue to operate either as, or within, a not-for-profit public service agency with continued Congressional oversight. We urge that any Department of Commerce plan for the future of NTIS be published for public comment in the Federal Register since privatizing NTIS would have such far-reaching consequences.

ALA believes that the following functions of NTIS be preserved:

1. Provision of a centralized source and permanent repository for all unclassified scientific and technical reports paid for with public money;

EXECUTIVE OFFICES: 50 EAST HURON STREET, CHICAGO, ILLINOIS 60611 · (312) 944-6780

2. Provision of bibliographic access to this literature through tools such as the NTIS Government Reports Announcements and Index;

3. Dissemination of the NTIS bibliographic materials, such as catalogs, indexes, abstracts, and newsletters, through the Government Printing Office Depository Library Program;

4 Operation of a sales program for this scientific and technical information at prices affordable for not-for-profit libraries, universities, students, small business entrepreneurs, and other similar groups.

Privatization Issues

It is not clear how privatization would further the objective of providing public and government access to government-sponsored research at a reasonable cost. In fact, concern for the commercial viability of a privatized NTIS could impede this objective. For example, highly important but esoteric research results might not be disseminated if market value becomes a primary acquisition criterion. Acquisition and dissemination of source agency reports should be in response to the needs of society at large and not in response to the profit and loss statement of a privatized NTIS.

Correspondingly, ALA strongly endorses the principle that publications produced with public monies remain free of copyright constraints. Indeed, section 105 of the Copyright Law (PL 94-553) excludes both published and unpublished works of the United States government from copyright protection. Legislation conferring copyright protection should not be included in any NTIS privatization proposal. Granting copyright of government information to any private organization removes materials produced at taxpayer expense from the public domain and conflicts with the public interest. We see no reason why a few members of the private sector should gain proprietary advantage and a potential commercial monopoly from government information while denying easy and inexpensive access to the majority of taxpayers who paid to develop that information.

ALA's additional concerns about privatizing NTIS include the following:

- It is poor public policy to turn the nation's scientific and technical information over to private companies which can be owned, or bought out by, foreign interests.

- Requiring federal agencies to deposit their reports with a privatized NTIS amounts to an inappropriate taxpayer subsidy to the private sector, which is thus spared the heavy costs of producing the information. On the other hand, the prices charged to users would be increased significantly if a privatized NTIS were required to pay federal agencies for their reports.

- Interagency agreements which save money and improve productivity by providing for joint production of microfiche, cooperative indexing, and maintenance of a permanent collection of any agency's publications would be jeopardized.

- The current status of NTIS as a government agency permits it to negotiate government to government to acquire and exchange government publications. Since most other governments do not usually sell their publications, it would be difficult for private firms to acquire a sufficient number of publications to duplicate the current system.

- Federal agencies currently buy information from NTIS to fulfill their mission. The cost to the government for buying back information will certainly increase if NTIS is privatized.

- Permanent availability of the research results of the federal government is essential, although most technical reports are not "best sellers." No one can predict which technical reports will be needed in the future. During the late 1970s, when there was an energy crisis, there was great interest in a number of long dormant studies on the use of ethanol as fuel. Permanent availability ensures that government and private researchers need not "reinvent the wheel."

- The ability of many source agencies to meet their statutory obligations to make information available to the public would be at risk if they were prevented from making a primary distribution before placing a report in the NTIS system. In addition, we believe Title 15, United States Code sec. 1154, requires primary distribution. It states: "...but nothing herein shall be construed to require the levying of fees or charges for services performed or publications furnished to any agency or instrumentally of the Federal Government, or for publications which are distributed pursuant to reciprocal arrangements for the exchange of information or which are otherwise issued primarily for the general benefit of the public."

- Public agencies would be reluctant to turn over their publications to a private entity with exclusive rights and would probably set up their own user fee programs.

- NTIS publications would effectively be eliminated from the Depository Library Program if a privatized NTIS were no longer required to print through the Government Printing Office. A privatized NTIS should be required to continue to provide these products to depository libraries to ensure that information on technical research and development is available to the general public as the law demands. Source agencies should not be restricted from primary distribution of appropriate materials into the Depository Library Program.

- Locating scientific and technical literature would become an expensive game of hide and seek if NTIS were sold to several private organizations. Costs would be higher to accommodate a profit factor, plus there would be no obligation for the private sector to provide equal services to all. Higher costs would affect government agencies and research contractors who use NTIS reports. It would hamper the acquisition of scientific and technical information by libraries and the general public. The government should control prices of its publications either through the terms of sale of NTIS or by contract arrangements with the private firms involved.

- Little used items, however important in a specialized area, may not be maintained permanently for sale by a private sector firm interested in minimizing overhead and maximizing return on investment.

- NTIS has provided the information industry, researchers, and the public with a single point from which it can identify and obtain scientific, technical and engineering information which fulfills their needs. Without any restrictions on its use, private organizations have been able to extract and add value to this information to best serve the changing needs of their customers. Any reconfiguration of the means by which NTIS provides access to government information could alter this benefit to the private sector.

Privatization Alternatives

We believe that the alternatives identified in the Federal Register must be considered in the context of government wide information activities. There is little disagreement that when government information is made available in a timely, cost-effective manner it is of benefit to government agencies, the taxpayer, and the recipients of the information. ALA does not believe that privatization is the best way to fulfill this mission.

ALA recommends that the Department of Commerce consider two additional alternatives:

- Continuing the operation of NTIS as a government agency;
- Merging all or parts of NTIS with another government information dissemination agency.

In conclusion, we appreciate the opportunity to comment on the privatization issues and the alternatives presented by the Department of Commerce. ALA is convinced that NTIS' current role as a vital element in the federal government's information management system is best served by remaining part of a governmental agency. We urge that the public have the opportunity to comment on the Department's specific recommendations for the future of NTIS, and that the proposal be published in the Federal Register for at least a 60-day comment period.

Sincerely,

Eileen D. Cooke
Director
ALA Washington Office

U.S. DEPARTMENT OF COMMERCE

- - - -

PRIVATIZATION PROPOSAL FOR THE NATIONAL TECHNICAL INFORMATION SERVICE

DRAFT

OCTOBER 1986

EXECUTIVE SUMMARY

In December of 1985, the Office of Management and Budget asked the Department of Commerce to develop a proposal for privatizing the operations of the National Technical Information Service. The study leading to this proposal was conducted by an intra-Departmental Task Force using a process which encouraged participation by government agencies, NTIS customers and companies in the information industry.

NTIS is a $22 million program which provides the public and business community with access to government sponsored scientific and technical information. One clear message which comes from a detailed review of the program is that NTIS is a very complex operation. Built up over the past forty years, it is a system of relationships and dependencies involving over 350 NTIS and Commerce support staff, several hundred source agencies, thousands of customers and almost one hundred private firms in the United States and dozens of foreign countries.

Another message is that NTIS must be counted among the most privatized of Federal agencies. It is not clear whether the extent of privatization is because of the opportunities presented by the complexity of NTIS operations or despite the constraints imposed by these complexities. What is clear is that because of its legislative requirement to be self-supporting, NTIS receives no appropriated funds for its basic operation, pays its salary and other costs from user fees, is driven to operate as efficiently as possible, creates market opportunities for a large number of private firms, and satisfies the needs of its customers.

Given a program so complex and so privatized, any decision to make further privatization moves must be supported by evidence of extensive benefit and minimal cost. Such evidence does not exist. In fact, as this report clearly demonstrates, the evidence is that extensive privatization presents substantial costs and risks for the government, for NTIS customers and for the information industry as a whole.

Given the impetus for this study, the governmental costs and risks must be of major interest. These clearly include monetary costs, since discontinuing any significant portion of the NTIS program will increase rather than decrease Federal appropriations. More important, however, are the policy costs and risks, those associated with U.S. competitiveness, national security, technology transfer, intellectual property rights and the availability of scientific and technical information.

Conversely, there is little evidence to show that extensive privatization will provide tangible benefit for NTIS customers or for government's privatization goals. There appears to be some benefit for the information industry, but it is questionable whether this is a net benefit or simply a redistribution of the current benefit level among firms in the industry.

There are some moves, however, that Commerce can make to change the NTIS program in a way which avoids major costs and risks while recognizing the complexity of the operation, contributing to the government's privatization goals, and benefiting both customers and the information industry. These moves include: (a) taking more aggressive steps to establish NTIS/private sector partnerships which will create market opportunities for the information industry; (b) contracting for NTIS advertising and promotion services; and (c) discontinuing an NTIS service which competes with the private sector. All of these moves are included in the Department's NTIS privatization proposal.

TABLE OF CONTENTS

		Page
I.	Introduction	1
II.	Study Process	2
III.	Findings	
	A. NTIS Operations	4
	B. Other Government Information Centers	7
	C. Value of the NTIS Program	8
	D. Goals and Extent of Privatization	8
	E. Risks and Costs	9
	F. Benefits	13
	G. Alternatives	14
IV.	Conclusions	15
V.	Recommendations	18

Appendix A.

1. List of Privatization Task Force Members
2. Federal Register Notice #1: Analysis of Comments
3. Decision Analysis Center Summary
4. Federal Register Notice #2: Agenda; List of Attendees
5. Description and Analysis of Options
6. Calculation of Termination Costs
7. NTIS Private Sector Initiatives
8. Comments of Dr. Harold Seidman
9. History of Privatization at NTIS

Appendix B.

Responses to Federal Register Request for Public Comments

I. Introduction

In its passback on the FY 1987 budget request, the Office of Management and Budget gave the following guidance to the Department of Commerce:

> "DoC is requested to convene an industry/government working group to develop a privatization proposal for NTIS to be included in the 1988 budget. All alternatives should be explored, including selling the operation to the private sector."

In lieu of the industry/government working group, Commerce proposed that the NTIS privatization study be conducted by an intra-Departmental task force (see Appendix A, Part 1 for a list of members) under a process which would include extensive private sector involvement (see Study Process at page 2). This proposal followed from:

- o The Department's judgment that the procedural constraints associated with establishment of an industry/government working group under the Federal Advisory Committee Act would delay completion of the study.
- o The Department's desire to ensure consideration of the views of all parties interested in the NTIS privatization issue.

This proposal was accepted by OMB, and the Task Force conducted its review during the spring and summer of 1986. This report sets forth the findings, conclusions and recommendations of the Task Force.

The report is organized into five sections. Following this introduction:

Section II describes the process used to conduct this study.

Section III discusses the Task Force's findings.

Section IV presents the Task Force's conclusions.

Section V sets forth the recommended privatization proposal.

A set of appendices follows section V. These appendices, referenced in the body of the report, give important details.

II. STUDY PROCESS

On April 28, the Task Force published a notice and request for public comment in the Federal Register. The notice (see Appendix A, Part 2) included:

- Information on NTIS operations.
- An offer of additional, more detailed information on NTIS operations.
- A request for comment on the privatization issues and alternatives initially identified by the Task Force.
- A request for expressions of interest from those private firms interested in operating all or part of the NTIS system.

The notice elicited 138 responses (see Appendix A, Part 2 for a list of respondents and an analysis of comments; see Appendix B for the actual responses). The period for public comment closed on June 10.

In mid-June, after most of the Federal Register comments were received, the Task Force spent 5½ days in the DoC Decision Analysis Center reviewing the issues and alternatives associated with NTIS privatization. In conducting its review, the Task Force used a computer assisted, hierarchial matrix evaluation structure which allowed for:

- The development of alternatives.
- The development of criteria against which to assess the alternatives.
- The assignment of scores and weights reflecting the importance of the criteria and the extent to which the alternatives satisfied them.

During this process (described more fully in Appendix A, Part 3) the Task Force developed nine some alternatives. These alternatives were derived from members' knowledge of NTIS operations and from the responses to the Federal Register notice.

The Task Force also used its knowledge and the Federal Register comments to develop some 40 criteria divided into five major categories:

- Long term impact on users.
- Long term impact on the information industry.

- Long term impact on government interests.
- Extent to which privatization goals are met.
- Transitional, i.e. short term, concerns.

On June 24, the Task Force announced that it would hold a full day public meeting on NTIS privatization (see Appendix A, Part 4 for the Federal register notice and meeting agenda). The purpose of this meeting was (a) to expose some of ideas derived from the decision analysis process to the public, and (b) to solicit public views on some key, unresolved issues arising from the decision analysis process.

The meeting was held on July 30, in the DoC auditorium with some 100 people in attendance (see Appendix A, Part 4 for a list of attendees). The proceedings included a discussion of the issues/alternatives identified in the decision analysis process, and resulted in the identification of one additional privatization alternative.

During the following weeks, the Task Force drew on its findings from the Federal Register responses, the Decision Analysis Center evaluation, and the public meeting to develop the conclusions and recommendations presented in this report.

III. FINDINGS

In conducting its analysis, the Task Force sought information on six different topics:

A. NTIS operations.

B. Operations at comparable Federal organizations, including the NASA program suggested by OMB as a possible model for privatization at NTIS.

C. The value of the NTIS program and whether the program should be continued.

D. Privatization goals and the extent to which current NTIS operations meet these goals.

E. The costs and risks which the government, NTIS customers and the information industry might incur from privatization.

F. The benefits which the government, NTIS customers and the information industry might achieve from privatization.

G. Privatization alternatives which might be considered.

A. NTIS Operations

NTIS is the central source for the public sale of:

- Scientific, technical and engineering reports describing research done by Federal agencies and their contractors/grantees.
- Similar reports prepared by state and local governments.
- Technical reports prepared by government research organizations in foreign countries.
- Federally generated, machine processable data files and software.

The major activities associated with this clearinghouse operation are:

- Acquisition of reports, files and software.
- Establishment of bibliographic control and preparation of various index and abstract materials.
- Maintenance of an archive.

- Reproduction of reports and tape files.
- Operation of a sales and distribution program.

The NTIS program includes two additional operations:

- NTIS manages the Federal government's most active patent licensing program.
- Because the clearinghouse operation requires specialized staff and equipment resources, NTIS is able to provide services, primarily distribution and customer accounting, to other Federal agencies.

The clearinghouse collection now includes some 1.7 million technical reports and over 2,500 data and software files. Approximately 70,000 new items are added each year. Major sources, representing the work of some 2,000 organizational or individual researchers, are:

Department of Defense	23%
Department of Energy	23%
NASA	4%
Foreign Countries	25%
All Other	25%

Sources are under no obligation to place material in the NTIS system. NTIS operates an aggressive acquisition program leading to ~~in~~teragency and government-to-government agreements for voluntary placement of materials in the system. There are some 270 such agreements currently in force.

NTIS is, for the most part, a secondary distributor:

- Through their own technical information centers, DoD, DoE and NASA supply reports directly to their respective agency personnel and contractors, with NTIS supplying these reports to the general public and business community.
- Many other Federal agencies make primary distribution of their reports through the Superintendent of Documents, with reports placed at NTIS only after the initial GPO offering.

As a result of its secondary distributor position, NTIS has few "best sellers." On average, NTIS sells about 10 copies of each document it acquires.

All documents acquired by NTIS, regardless of source, are placed in the NTIS archive on paper or microform, and are permanently available for sale.

Because they represent the results of research conducted under government sponsorship, few (less than 5 %) of the documents sold by NTIS carry copyright protection.

By statute (15 U.S.C. 1151-1157, as amended) NTIS is a self-supporting agency. With the exception of some $500,000 appropriated for its patent licensing program, all NTIS activities are funded through the sale of its products and services.

Annual NTIS sales revenues of approximately $22 million are derived from:

Full text reports	58%
Bibliographic and announcement products	19%
Software and data tapes	7%
Services to other agencies	14%
Patent licensing fees	2%

Because it conforms to both a public purpose and a requirement to be self-supporting, NTIS operates on what is essentially an overall "break even" basis. Not all individual products, however, recover their costs.

Approximately 75% of the customers NTIS serves directly are small businesses. Other small businesses are served indirectly through the public and university libraries which purchase NTIS products.

The list of regular NTIS customers includes such major firms as IBM (annual NTIS purchases of over $125,000), General Electric and AT&T Bell Labs, along with such academic/research institutions as MIT, Georgia Tech, Harvard Medical School, Stanford University and the University of Texas.

Frequent NTIS customers maintain deposit accounts against which they draw when purchases are made. These accounts total approximately $8 million at any given time, and are held by NTIS in the U.S. Treasury. Monies in these deposit accounts are unfunded liabilities which represent the bulk of NTIS' working capital.

NTIS operates from facilities leased by GSA; purchases its reproduction services from DoC and GPO; and uses DoC owned/leased computer equipment to support its bibliographic, order processing and accounting activities. Other than cash and accounts receivable, the major NTIS book asset is its inventory of printed documents available for sale.

NTIS employs some 330 people; there are an additional 40 on-site DoC Office of Publications personnel who work primarily on NTIS related activities.

B. Other Government Information Centers

The Government has three other scientific and technical information centers somewhat similar to NTIS:

- The Energy Department's Office of Science and Technical Information (OSTI)
- The Defense Technical Information Center (DTIC)
- NASA's Scientific and Technical Information Facility (STIF)

Energy/OSTI

Reports placed in the OSTI system come from internal DoE sources, i.e. labs, and from DoE's contract researchers whose contracts require deposit of their report in the OSTI system. Distribution of reports by OSTI is limited to internal DoE offices and to DoE contractors.

OSTI contracts with a private firm for warehousing, storage, reproduction and distribution of its materials. The contract is a no cost arrangement, with the contractor receiving fees from the sale of microfiche reports to the DoE offices and contractors.

The contractor's costs include only reproduction supplies and personnel salaries. All other parts of the OSTI program (including the original reports, facilities, equipment, utilities, ADP support and postage which OSTI provides for the contractor) are funded by OSTI appropriations. Arguably, the contractor's revenues from sales to DoE offices and contractors might also be considered as funded by appropriations.

Defense/DTIC

Like OSTI, DTIC receives its reports on a mandatory basis from internal and contractor sources. Distribution is limited to "registered users," primarily DoD contractors and offices, on a highly structured, classification-based access system.

DTIC contractor support is limited and is funded by appropriations. DTIC charges users a small fee for each report distributed, but the fee does not cover even distribution costs, much less any other cost of the DTIC program.

NASA/STIF

The STIF receives its reports from NASA research contractors on a mandatory basis, and distribution is limited to internal NASA offices and contractors. Warehousing, storage, reproduction and distribution are provided by a private firm under a contract funded solely by appropriations.

The Task Force notes that, in the case of OSTI and STIF, NTIS helps to finance these operations because NTIS pays these agencies for copies of the reports which NTIS acquires and sells to the general public and business community.

C. Value of the NTIS Program

NTIS and its predecessor organizations have continued to operate for 40 years, through eight different Presidential administrations The operation has changed, and there have been several reviews of its privatization potential (see Appendix A, Part 9), but there has been no serious attempt to dilute its focused mission.

The President's Private Sector Survey on Cost Control (the Grace Commission) argued that NTIS should be the focus of an even more comprehensive, government R&D information system.

No participant in the privatization study -- customer, source agency or information industry firm -- suggested that the NTIS program should be abandoned.

More than 10,000 customers -- including most of the largest libraries, firms, universities, and research organizations in the country -- are frequent enough users to warrant their establishment of deposit accounts with NTIS.

Virtually all research oriented Federal agencies -- including Defense, Energy, NASA, Veterans Administration, HHS, and Transportation -- use NTIS as a vehicle for providing the general public and business communities with access to their research results.

In reviewing agency budget requests, OMB often uses a "market test" to determine a program's real value. The question is usually asked as "would the user be willing to pay directly for this program?" The NTIS operation is supported almost exclusively by user fees.

D. Goals and Extent of Privatization

At an early stage in its review, the Task Force noted that pursuit of different privatization goals could result in quite different privatization proposals. To clarify the issue, OMB was asked to define its privatization goals. The response was that defining privatization goals in the context of NTIS operations was a responsibility of the Task Force.

NTIS operations are funded almost exclusively from user fees. Except for the $500,000 provided for its patent licensing program, NTIS receives no appropriated funds.

Through its patent licensing royalty revenues and the interest free use of deposit account funds, NTIS returns significant monies -- about $5 million last year -- to the U.S. Treasury.

Employees at NTIS do not represent any drain on the Federal payroll.

The results of four recent A-76 competitions (each "won" by the in-house NTIS staff), the financial turnaround engineered in the last year, and the recent efforts centered on improving customer satisfaction, all suggest that the legislative requirement for self-sufficiency provides NTIS with incentives to operate efficiently and effectively.

Through contracts with NTIS and (primarily) through acquiring, adding value to, and remarketing NTIS products, private firms have derived significant sales and profit opportunities from NTIS operations. In the past year, these opportunities totalled at least $11.7 million, involving some 80 firms. (See Appendix A, Part 7 for details.)

E. Risks and Costs

Government Risks and Costs

Several information industry firms are now controlled by foreign interests. Selling or extensively contracting NTIS to such firms risks foreign control or manipulation of the government's most extensive collection of scientific and technical information. Such control or manipulation, whether benign or otherwise, could be detrimental to U.S. scientific and technical competitiveness. Moreover, even if the sale or contract process could exclude foreign controlled firms from winning or even making a bid, there is no assurance that the winning firm would not subsequently be acquired by foreign interests.

Closely allied to the foreign control issue is the issue of foreign access. As a government agency, NTIS complies with the government's foreign policy decisions to limit some nations' (e.g. USSR and Libya) access to the NTIS information collection. The limiting system is not fool-proof, but it presents these nations with more access difficulty than would be the case under a privatized NTIS system.

While the Task Force does not wish to appear unduly alarmist on the issues of foreign control and foreign access, it notes that these issues were of major concern both to the Task Force members as well as to the Federal agencies who responded to the Federal Register notice.

Government's interest in technology transfer as a means of enhancing U.S. competitiveness is long-standing and, in recent years, increasing. By providing a central collection and access point for much of this technical information, NTIS furthers this governmental interest. Extensive privatization risks this interest since it is likely to result in at least a 50% reduction in the placement of material in the NTIS system. The willingness of some important source agencies to place their material in a privatized NTIS is highly questionable. Another agency, one which provides a good deal of foreign information to U.S. business through NTIS, is prohibited by law from releasing material directly to a private firm. And it is unlikely that foreign countries, which provide information as a result of government-to-government agreements, would continue contributing their materials to a private system. On this final matter, for example, the Task Force notes that the Japan Information Center for Science and Technology was willing to provide U.S. access to its database only through NTIS as a government agency.

Source agencies indicated that the permanent archive and availability features of the NTIS system were important to them. Privatization of the NTIS system risks the loss of these features since it may not be economical, at least at NTIS price levels, for a private firm to continue these features for a collection that sells only about 10 copies per title.

The lack of copyright protection, the risk of diminished source agency input, and the lack of "best sellers" suggest that operating NTIS as a private system, while maintaining its public purpose of the widest possible dissemination of research results, may provide a very limited return on investment. Should this private system fail, the government risks either the abandonment of the NTIS mission or the extensive costs of recreating the NTIS program.

The degree of participation in the Federal Register and public meeting process demonstrates intense interest in the NTIS privatization issue. Government and NTIS customer participants were virtually unanimous in opposing any extensive privatization. The information industry was divided, with beneficiaries of the current system adopting a no-major-change or wait-and-see posture, and non-beneficiaries suggesting extensive privatization. This situation suggests that any privatization decision risks opposition from some party, with the risk of opposition to extensive privatization being somewhat greater.

Any privatization action which results in establishing a single private firm as the access to the NTIS system risks the government's interest, expressed in OMB Circular A-130, in preventing monopoly control of Federal information dissemination.

Any extensive privatizaton moves would result in net costs to the government. Depending upon the alternative chosen, these costs would include: up to $21 million for employee termination and settlement of deposit account and other liabilities; approximately $700,000 for the loss of interest free use of deposit account monies; and $7 million in NTIS service/use payments to Commerce and other agencies. Any source agency decision to operate its own distribution system in lieu of the private successor to NTIS would add to these estimates. These costs would not be fully offset by the proceeds from any privatization sale because (a) there are no fixed or property assets; (b) the book value of NTIS is limited to approximately $14 million in cash, receivables and inventory; and (c) the lack of copyright precludes NTIS from offering the buyer any exclusive right to own, reproduce or sell the material in the NTIS system.

Customer Risks and Cost

In their Federal Register responses and in the public meeting, customers identified some privatization costs and risks that were the same as those described above for the Government. Customers were particularly concerned that a privatized NTIS system: (1) would not maintain the archive feature which assured the availability of old and low-volume-selling reports; (2) would result in a substantial cut in the number and quality of documents entering the system; (3) might sacrifice public purpose goals for profitability; (4) would create potential for establishing monopoly control;.or (5) might become a business failure which the government would choose not to remedy. Customers were also very much concerned about two other risks which extensive privatization might entail:

- The current NTIS system provides customers with reasonably efficient, central indexing for, and one stop access to, the bulk of the government's research results. Any privatization proposal which dismembers the system by function, product and/or subject area would eliminate these features, forcing customers to spend additional time and effort going to several outlets or to the individual source agencies. The Task Force notes that it would be difficult to overstate the user community insistence that central indexing and one stop access be retained.

- Many customers, particularly public and university libraries serving a local business and research community, noted (1) that the government had an obligation to provide information on the results of tax supported research at the lowest price that would recover costs; (2) that libraries had for some time been under considerable financial pressure from rising costs and steady or falling revenues; and (3) that, as discussed above, a privatized NTIS may have some difficulty making money. These customers were concerned that privatization would risk substantially higher prices which would, in effect, limit the access which they and their clients have to the system. From a governmental perspective, this pricing risk, if actualized, would mean reducing system access for many of the small, research oriented or high tech firms that benefit most from the transfer of government technology.

Information Industry Costs and Risks

As discussed previously, the Task Force was concerned that, given the constraints associated with diminished input, lack of copyright protection and limited per title sales, a privatized NTIS may have some difficulty in making an acceptable return on investment. The private sector apparently agrees with this assessment: no firm came forward with, or showed any interest in, an offer to buy the NTIS operation. Rather, the industry proposals included:

- o Acting as a contractor to operate the entire NTIS program.
- o Acting as contractor or agent for the retail distribution of NTIS products.
- o Acting as producer and seller of those NTIS materials identified as "value added" products.

The scope of these proposals limits the risks privatization poses for the industry:

- o A contractor risks some financial loss if it is "beaten out" in any subsequent recompetition of the initial contract.
- o Lack of copyright precludes NTIS from offering exclusive rights to reproduce and sell products. With several firms in the market as sales agents, each firm risks an unprofitable operation.
- o If one private contractor operates the entire NTIS program, or its sales and distribution elements, it could, through product, operating or pricing strategies limit the access and profit opportunities of other firms. This becomes a risk for those firms, both current and prospective, who can use NTIS materials to create profit opportunities. From a governmental perspective, the irony (and the risk) is that privatization may reduce rather than increase private sector opportunities.
- o Privatization risks a zero sum game in which private firms currently profiting from their relationship with NTIS are simply replaced by other firms. This risk applies only to those firms that benefit, or see the potential for benefit, from the current situation.

In addition to the costs and risks incurred separately by each of the three major parties interested in NTIS privatization, these parties collectively will incur short term costs and risks due to the operational disruption associated with any extensive change in the current system.

F. Benefits

Government Benefits

The Task Force could identify few operational or mission benefits which government might achieve from privatization. It is possible that the operational and financial flexibility available to a private firm may place a private system in a better position to make use of emerging information technologies. But such benefits are speculative, at best, and the evidence, e.g. NTIS' agreement for Digital Equipment Corporation to sell the NTIS database on CD/ROM, suggests that similar benefits can be achieved in the current system.

The governmental benefits from privatization appear limited to areas associated directly with privatization goals:

- Depending on the alternative chosen, privatization would reduce the number of Federal government employees by a maximum of about 360 people. The Task Force notes that there would not be a comparable reduction in Federal payroll costs since salaries for NTIS employees are paid from user fees rather than appropriations

- A reduction in the number of Federal employees would reduce the government's pension liabilities and payout. The Office of Personnel Management suggests, however, that this reduction would be unnoticeable and would likely be cancelled out by employee withdrawals of prior retirement contributions.

- The government would be out of a business which competes with the private sector. The Task Force notes, however, that when industry representatives were asked to identify those areas where NTIS competition was most determental to their interests, the representatives identified NTIS' custom search service and its Published Search products. Annual NTIS revenues from custom searching total about $20,000. Published Searches are produced and distributed for NTIS by a private sector contractor who earns over $400,000 from this activity. In addition, NTIS pays about $160,000 in fees to the private sector owners of the databases referenced in the Published Searches.

Customers Benefits

The Task Force's review of NTIS operations suggests that privatization per se will not necessarily result in better or more efficient service to NTIS customers. Comments from the information industry, however, suggest that privatization would lead to the development of more "value added" products than are currently available. The industry stated that these products have not been developed to date because private firms fear that, should a profitable market for such products emerge, NTIS would step in with a similar, lower priced products and take over the market.

Information Industry Benefits

To the extent that NTIS vacates the market or that profits can be made from serving as contractor to, sales agent for, or overall manager of, a privatized NTIS system, privatization will confer financial benefits on the industry, or at least on those firms able to (a) win a sales/contract bid, or (b) develop some subsequent arrangement with such a winner.

The degree of benefit depends primarily on the nature of the privatization action. At one extreme, a privatization proposal to contract for operation of a small part of the NTIS system will confer relatively little benefit. At the other extreme, a privatization proposal made at the public meeting by the Information Industry Association calls for NTIS' acquisition, bibliographic control and archiving operations to be funded by appropriations, with NTIS distributing its products at a price sufficient to cover only reproduction costs. Private firms would use the NTIS materials and information to produce and sell the industry's products and services. Privatization action of this kind would confer a relatively larger benefit on the industry.

G. Alternatives

During the course of its review, the Task Force identified, or was presented with, ten basic alternatives for the privatization of NTIS:

Merge NTIS with the Government Printing Office.

Status quo.

Sell entire NTIS operation to the highest private sector bidder.

Contract out entire NTIS operation.

Partially divest; fund acquisition, bibliographic control and archive functions with fee paid by retail sale contractor or licensee.

Establish NTIS as a government corporation.

Expand NTIS operations to include electronic dissemination and subject areas beyond science and technology.

Establish NTIS as the National Technology Library (comparable to the National Library of Medicine, the Library of Congress or the National Agricultural Library) and include it in a five part National Technology Center.

Terminate the program, allowing the private sector to assume whatever functions it chooses.

Use appropriations to fund acquisition, bibliographic control and archive functions; private sector to operate retail market as it chooses.

IV. Conclusions

Based on the findings discussed in Section III, the Task Force developed the following conclusions:

A. The NTIS operation is a highly complex system involving significant internal and external interdependencies. Any privatization move which might disrupt this system should be approached with great care.

B. Because they are funded largely by appropriations, receive their reports on a mandated basis, and distribute documents only to internal and contractor personnel, none of the three technical information centers operated by other agencies provide a relevant model for the privatization of NTIS.

C. NTIS provides substantial value to the government, to NTIS customers, and to the information industry. The program, whether under government or private sector management, should be continued.

D. By almost any definition of privatization goals -- lower government appropriations, expanded user fees, greater efficiency, lower employee salary costs, or expanded private sector opportunities, -- NTIS is already a substantially privatized operation.

E. Any extensive move toward further privatization of NTIS creates significant risks and costs for government, for NTIS customers and for the information industry.

For government, the risks and costs include:

Foreign control of the NTIS information system.

Easier access to the NTIS system by proscribed nations.

Loss of the NTIS archive.

Opposition from those who don't like the decision.

Potential monopoly control.

Appropriation costs for shutting down all or part of the NTIS operation.

Loss of at least 50% of NTIS' annual report input.

Abandonment of mission or costs to recreate the system if a privatized operation fails.

NTIS customers incur the same costs and risks associated with the archive, the availability of old or low demand reports, monopoly, reduced document input and failure of a private system. In addition, customers risk:

Loss of a central index for, and one stop access to, the NTIS information base.

Higher prices which could reduce access for many small businesses.

Risks and costs for the information industry include:

Financial loss for a contractor failing to win a recompeted contract.

Unprofitable operation as a producer/seller.

Limited market opportunities.

Zero sum replacement of firms benefitting from the current system by new firms benefitting from a privatized system.

F. Except for those benefits which might accrue to a few information industry firms, the benefits of privatization are few and of doubtful value:

o Tangible government benefits would be minimal: government competition with the private sector would marginally decrease, and the number of, but not the costs for, Federal employees would be reduced.

o NTIS customers might benefit from the new, value added products which the information industry might develop, although the Task Force finds that the industry's rationale for not having developed such products in the past to be questionable.

o The information industry would benefit financially from a diminished NTIS market presence, but much of this benefit may be merely a redistribution of current system benefits to new firms winning sale or contract bids. The size of overall benefit would depend on the privatization alternative chosen.

G. The Task Force is unwilling to accept any of the ten privatization alternatives as the basis for an NTIS privatization proposal (see Appendix A, Part 5 for more detailed analysis):

o Two of the alternatives -- merger with GPO and the status quo -- were rejected because they make no progress toward any privatization goal, while the Task Force finds that further progress is both possible and desirable. In addition, the GPO merger alternative was seen as an attempt to force fit two organizations which are institutionally, philosophically and operationally incompatible.

- Three of the alternatives -- sale, contract and partial divestiture -- were rejected because the Task Force was unwilling to accept their meager benefits, available primarily to a limited number of information industry firms, in exchange for the substantial risks and costs these alternatives would impose on government, NTIS customers and the information industry as a whole.
- One alternative -- establishing a government corporation -- was seen as having potential for greater operational flexibility which might lead to improvements in the NTIS program, but it was rejected as not being a true privatization alternative.
- Two alternatives -- expansion and the National Technology Library -- were rejected because they failed to address the privatization issue and because their scale and technical complexity were beyond the scope of the Task Force.
- One alternative -- terminating the program -- was rejected because it meant the complete abrogation of government's interest and role in fostering competitiveness by providing its research results to business.
- One alternative -- appropriation funding -- was rejected because in addition to the costs and risks it would impose on government and NTIS customers, the Task Force was unwilling to recommend any action requiring continued appropriations to fund a program now funded exclusively by user fees.

As the Task Force neared completion of its study, it became aware of several proposals suggesting that government activities might be spun off, as a contract or sale, to firms in which the Federal employees that previously performed the activities have substantial ownership. Without giving extensive analysis to these proposals, the Task Force notes that legislation authorizing such arrangements has not yet passed. More importantly, the Task Force notes that prior Federal employment provides neither the government nor NTIS customers with any protection from the significant costs and risks identified earlier as being associated with any other contract or sale alternative for privatizing NTIS.

V. Recommendations

Having rejected all of the extensive privatization alternatives, the Task Force sought to review each of them again in order to identify those elements which, if combined into a single proposal, might: (a) make further progress toward privatization goals; (b) provide benefit for the government, NTIS customers and the information industry; and (c) minimize the costs and risks. As a result of this review, the Task Force was able to develop a recommended proposal incorporating the following elements:

1. NTIS should more aggressively seek to establish partnerships and joint ventures with information industry firms. Such arrangements would allow these firms to use NTIS materials to develop products and services that will (a) create market opportunities for the industry, and (b) provide more value for both NTIS and industry customers. A major part of this effort should focus on areas where NTIS materials and government information systems knowledge can be combined with private sector technology and financial support to develop products and services that make the benefits of information technology advances more available to users of government scientific and technical information.

   The Task Force notes that NTIS has already made some moves toward such partnerships, including making its database available (a) online through Dialog and similar private vendors, and (b) on CD/ROM through the Digital Equipment Corporation. Nonethless, the Task Force does not believe that, to date, such moves have been as aggressive as they can be or as the times demand them to be.

   The Task Force also notes that, as a result of some discussion along these lines at the public meeting, two information industry firms have already come forward to explore partnership possibilities with NTIS. Though both firms were cautioned that neither Commerce nor OMB had seen the Task Force report, they were still sufficiently interested to make arrangements for members of their staff to spend several weeks at NTIS reviewing its materials and systems.

2. As part of this more aggressive partnership approach, NTIS should:

   o Make information on its materials and on its interest in partnership arrangements more clearly known to firms in the information and information technology industries.

- Name a senior level information professional, responsible to the NTIS Director, who would be charged with maintaining active NTIS involvement with the private sector. This individual would ensure that private firms approaching NTIS are able to have access to appropriate NTIS managers and staff to obtain information, present proposals, obtain feedback and get cooperation in developing innovative products and services.

- Meet with the private sector to establish an NTIS industry associates program similar to that operating at the National Bureau of Standards. A program of this kind would provide the private sponsor with the opportunity to have members of its staff work closely with NTIS information professionals for a specified period, on a full-time basis, to develop tools, services, or products that can be marketed to the scientific and technical information user community. Both NTIS and the sponsoring organization would benefit from the program. By getting exposure to the full spectrum of NTIS information processes, products, and services, the Industry Associate would obtain an understanding of how current products and services are provided, and would have the opportunity to communicate industry views, expectations, and needs directly to NTIS management. NTIS would obtain the temporary services of several high-level specialists at no cost to the Government, while encouraging and facilitating private sector participation in the dissemination of government scientific and technical information.

- Offer specific NTIS products directly to private sector firms. By providing private firms with magnetic tape or microfiche for such products as Title Index, Corporate Author Authority File, and Standard Technical Report Number, NTIS could create opportunities for the private sector to add value to and market these publications to the public.

- Consult with OMB and other Federal agencies on the need for and feasibility of designating NTIS as a coordinating agency for government-wide scientific and technical information under OMB Circular A-130. As the legislatively authorized clearinghouse for government scientific and technical information, NTIS can play a key role in implementing the Circular and, particularly, in meshing its provisions with the interests of the information consumer and the information industry. Since the government produces an ever-increasing amount of technical information in electronic form, source agencies, users, and information marketers would all be well served by an NTIS which knows the information system and which has active partnerships with the private sector to exploit the benefits of these electronic technologies. NTIS would be in the best position (a) to assist agencies in planning new information programs and (b) to incorporate new technologies, information industry market opportunities and user needs into these plans.

- Make a comprehensive review of the costs and benefits of forming a government corporation. NTIS meets the generally accepted criteria for a government corporation (see Appendix A, Part 8), and the concept presents an interesting and relatively novel way of providing NTIS with the flexibility which (a) might lead to further program improvements, and (b) might be necessary to facilitate a more aggressive move into partnerships and joint ventures with the private sector.

3. NTIS should contract out its advertising and promotion activity. The Task Force took particular note of the complexities and interdependencies of NTIS operations, and concluded that piecemeal contracting of its activities risks serious disruption of these operations for no apparent benefit. The advertising and promotion activity, however, represents perhaps the only discrete and separable element. Moreover, given the nature of these activities, the skills and talents to perform them are more likely to be found in greater abundance in the private sector. If possible, the contract should be an incentive arrangement, rewarding the contractor on the basis of volume sales attributable to contractor performance. The total annual cost of this NTIS activity is $1.3 million, including salaries for some 10 employees. Through attrition, training and internal placement, NTIS should be able to avoid any close out costs associated with this recommendation.

4. NTIS should discontinue custom searching of its database. As noted by the information industry, this activity competes directly with identical services offered by private information brokers, many of them small businesses. NTIS should assist these businesses by compiling a list of such brokers and providing the list to customers seeking custom search services from NTIS.

These recommendations will further privatize NTIS operations and will benefit NTIS customers and the information industry without incurring the costs and risks associated with all of the other alternatives reviewed by the Task Force.

Resolution on Foreign Control of Federal Libraries and Document Depositories

WHEREAS, The information resources of the federal government are vital to the security and economic well being of the United States; and

WHEREAS, Federal libraries and document depositories provide crucial support and unique resources for the development of policies, implementation of programs and ongoing operations of government agencies; and

WHEREAS, Federal libraries and librarians are key to effective utilization of these information resources, performing an inherently governmental function; and

WHEREAS, Federal libraries provide the longitudinal corporate memory of their agencies and their staffs, perform agency evaluations and actions under the Freedom of Information and Privacy Acts; and

WHEREAS, The American Library Association has opposed contracting out of federal libraries; and

WHEREAS, The Administration has expressed its concern regarding the sensitivity of certain types of federal information; and

WHEREAS, This Administration is using Office of Management and Budget Circular A-76 to force the contacting out to organizations outside the federal government of the information services provided by federal libraries and document depositories; and

WHEREAS, Circular A-76 does not restrict contracting for federal library and depository services only to United States firms and organizations; and

WHEREAS, At least one major departmental library and key functions in other federal libraries are already contracted out to U. S. subsidiaries of foreign firms; and

WHEREAS, It has been announced that a foreign owned firm is to be the successful bidder on another A-76 action which would allow this firm to take over the operation of a major scientific library in the federal government; now, therefore, be it

RESOLVED, That the American Library Association believes it is not in the best interest of the American people to contract out federal information programs and organizations to foreign owned or controlled firms; and, be it further

RESOLVED, That the American Library Association urge the Congress of the United States to declare a moratorium on all contracting out of federal libraries and document depositories and to hold further hearings on this matter; and, be it further

RESOLVED, That copies of this Resolution be transmitted to the President of the United States and his National Security Adviser, the President of the Senate, the Speaker of the House of Representatives, appropriate committees of the Congress, and the Director of the Office of Management and Budget.

Adopted by the Council of the
American Library Association
Chicago, Illinois
January 21, 1987
(Council Document #26.7)

Mr. PRICE. Thank you, Dr. Detlefsen.

We will proceed now to hear from Mr. Robert Edgell, the Government Procurement Specialist, with the American Federation of Government Employees.

Mr. EDGELL. Thank you, Mr. Chairman. It is my pleasure to represent the people of the American Federation of Government Employees, and to carry personally to you the greetings from our Members in North Carolina, who you were able to meet with in the recent past.

I will this morning refer to my written statement, but not read it in total. I would like to cover a few high points from the view of the American Federation of Government Employees.

From the view that we look at A-76 and the Administration's contracting out policy, from a Government-wide point of view and bring that back to some of the issues that relate to contracting out of NTIS.

I would like to just touch on some current issues that are mentioned in my statement. We are alarmed at the Administration's push through the budget process, to contract out a wide spectrum of Government functions.

The current issues that we see from an overall viewpoint include the lack of comprehensive legislation on contracting out; this entire policy is carried out through an Executive Circular. It has not been legislated by the Congress.

Also, the failure of OMB to report actual cost data to Congress, and also strong indications that contracting out costs are rapidly escalating, thereby wiping out the estimated savings they expected from the program.

These are areas of serious deficiency in the current A-76 program, and they combine to support a position that contracting out should not be expanded, but rather a spending freeze or reduction is necessary to bring the program under fiscal control.

I would like to also talk in terms of the need for comprehensive legislation, the lack of accountability to Congress and to the public and the increased annual costs, which demand that legislative standards and controls be developed in this area.

At a minimum, the people of AFGE call for contracting out legislation that would provide an annual report to Congress on the extent and cost for contracting, stop the annual cost increases based on contract modification, ensure competitive bid processes, and some other details.

This action would force OMB to put some constraints where there currently are none in its service contract policies. It would also force efficiency and productivity in contracting out policies.

We look upon it as a scandal that there are no effective budgetary controls on the size and cost of the contracted-out work force. We urge Congress to require OMB to place service contracting on a line item basis with civilian payroll costs.

We need to remember that the costs of contracting out is just an alternative cost for human resources doing Government work.

I would turn to the expanding A-76 program and the effort to contract out the National Technical Information Services as an example of this expansion.

We have talked in the statement about cost control problems, but we see that the Administration is clearly dedicated to expanding the contracting out program. There are some recent announcements for massive pushes to contract out services in the Veterans Administration Medical Centers, and this includes the hospital canteen service that operates from a non-appropriated trust fund.

Now I bring this example up because you have within NTIS a similar, self-sufficient organization.

We find it difficult to understand how the Office of Management and Budget expects to save appropriated dollars which are zero for NTIS, and also zero for the hospital canteen food service, how you can save plus from zero is beyond us. I am not an economist, but I don't know how you can save appropriated money when you don't appropriate any.

I think that point has been brought up by Members of the Committee, but it needs to be reenforced. It would be disastrous for the Department of Commerce, after taking a management action, to then come back to the Committee and say we now need appropriated money, which you have never provided before, because we made a mistake and contracted out a self-sufficient agency.

We are making that same argument relative to hospital canteen food services in the Veterans Administration.

But I think these are examples of the economic blindness that permeates the contracting out pushed that is centered in OMB Circular A-76.

So in summary, I would say that the American Federation of Government employees is convinced that current contracting out practices, carried out under OMB Circular A-76, are adversely affecting good government today, and are hurtling us toward future chaos of government operation. I think that that has been brought out very clearly by Members and witnesses this morning in reference to the National Technical Information Service.

That will conclude my statement, Mr. Chairman, and later I would be pleased to answer any questions. Thank you.

[The prepared statement of Mr. Edgell follows:]

STATEMENT OF

ROBERT E. EDGELL
GOVERNMENT PROCUREMENT SPECIALIST

AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES
(AFL-CIO)

BEFORE THE

SUBCOMMITTEE ON SCIENCE, RESEARCH, AND TECHNOLOGY
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY
U.S. HOUSE OF REPRESENTATIVES

ON

OMB CIRCULAR A-76

MARCH 4, 1987

INTRODUCTION

The American Federation of Government Employees, AFL-CIO is pleased to have this opportunity to appear before this Subcommittee to testify on Contracting Out and OMB Circular A-76. As the largest Federal sector union, representing over 700,000 employees, AFGE has been in a unique position to observe the effect of OMB's contracting-out policies on the Federal Government, the nation's taxpayers, and Federal employees.

Before commenting on current issues related to OMB Circular A-76, I would like to note that AFGE has previously testified that it believes the time has come for comprehensive legislation governing this government's contracting-out for Federal sector services. The Office of Management and Budget continues to utilize the existing legislative void to administer contracting-out policies to the detriment of the nation's taxpayers, good government, and Federal employees. Recent OMB actions to expand this program and to modify the rules governing contracting-out clearly demonstrate that the Administration intends to worsen contracting-out abuses.

While Congress in the past has legislated restrictions on contracting-out, these actions have not addressed the root of the problem, nor provided a cure. Rather, they have merely provided the first important and necessary step of recognizing the problem and temporarily ameliorating some of its adverse effects.

Current Issues

The American Federation of Government Employees is alarmed by the current Administration's push to increase the number of

Office of Management and Budget (OMB) Circular A-76 cost studies for contracting out purposes. Our concerns about the contracting out escalation centers on a number of major issues, including: (1) the lack of comprehensive legislation on contracting out; (2) the failure of OMB to report actual cost data to Congress; and (3) strong indications that contracting out costs are rapidly escalating, thereby wiping out the estimated savings expected from this program. These areas of serious deficiency in the current A-76 program combine to support a position that contracting out should not be expanded, but rather a spending freeze or reducing is necessary to bring the program under fiscal control. Let me generally comment on the major A-76 issues that need action now.

There has long been a need for comprehensive legislation on contracting out. The lack of accountability to Congress and to the public, and increased annual costs demand that legislative standards and controls be developed in this area. At a minimum, we call for contracting out legislation that would: (1) provide an annual report to Congress on the extent and costs for contracting; (2) stop the annual cost increases based on contract modifications; (3) insure a competitive bid process; and (4) offer a 15% cost savings differential, versus the current 10%. While this legislation is being considered, the rapid growth of contracting out should be restrained by limiting expenditures at the Fiscal Year 1987 level.

This action would force OMB to put some constraints where there currently are none in its service contracts. It would also force efficiency and productivity in contracting practices.

It is an absolute scandal that there are no effective budgetary controls on the size and cost of the contracted-out workforce. We strongly urge that Congress require OMB to place service contracting out on a line item basis with civilian payroll cost. After all, the cost of contracting out is just an alternative cost for human resources doing government work.

In reference to rapidly escalating contracting out costs, there are a number of sources to document these increases even though DoD and other agencies do not make an annual report to the Congress. (AFGE conservatively estimates that contracting out costs will be 45-50 billion dollars in FY'86, roughly comparable to the entire civilian payroll.) Let me review a few of these cost increase cases that are available to the public, mostly from GAO reports. In the first case, GAO audited service contracts at Selfridge Air National Guard Base and the Tank-Automative Command in Michigan. The dollar facts are that the original contract was let in December, 1980, for a three-year period at $6.9 million. Three years later, these contract costs had increased to $11 million -- a 60% increase over three years. At Richards-Gebaur AFB in Missouri, costs for a support contract grew from $4.8 million in 1979 to nearly $10 million in 1984 -- a 104% incease. At Kelly AFB in Texas, GAO reported that costs for an equipment measurement laboratory contract jumped from $2 million to $4 million in two years. In the Army Southeast Region, a telephone service contract with RCA escalated 15% in the first year and negated the estimated savings for the entire five year period of the contract. Time after time, official reports document that contracting out costs are escalating at a rate of over 20% per year and that the purported savings -- based on "estimate to estimate" economics -- are not being realized when audited on an estimated cost to actual payment basis.

A report submitted to Congress in early 1984 further supports that contracting out costs escalate rapidly. This data was in response to the FY 1984 DoD Authorization Act (Public Law 98-174) that requested data on contracting out between October 1, 1980, and October 1, 1982. The DoD report reviewed their experience with 235 contracts awarded under the provisions of OMB Circular A-76. As shown on the primary chart from this report (Attachment 1), DoD asserts that the cost of contract operation was 24% less than the bids submitted by the in-house workforce. It should be noted that the 24% savings (Part A of the chart) is based upon estimate to estimate calculations. Fortunately, this particular law, initiated by Representative Roy Dyson of Maryland, required DoD to report "the actual cost of contractor operation." Since the actual costs of contracting out are not normally made public, DoD had to do some fast calculating when the numbers came in (Section B. line 6 of Attachment 1) because the actual costs for contracting had increased substantially over the estimates (plus $89 million or 11.4%) in the first year (Attachment 2).

In addition to this data, the cost information on Attachment 3 shows the estimated cost and actual payments for ten service contracts in the Department of Defense. This data is documented by GAO Report NSIAD-85-49, earlier GAO reports, and military service correspondence. As can be seen, the contractor bids for this work totaled just over $44 million, but the actual payments were $70 million. . .a 59% increase in actual cost. This type of data indicates that, as with hardware procurement, cost controls are not present in the A-76 process and, therefore, estimated savings are not forthcoming.

Adding to this information is a recent Army evaluation of their contracting out program. This report cites a number of deficiencies in the contracting out program, including findings that costs associated with contracting out are escalating rapidly and that savings reported for the A-76 program are highly suspect. Further, the report concludes that the Army contracting out program is inconsistent, inefficient, and floundering. We have included findings from this report at Attachment 4.

The basic point made here is that more and more data is surfacing that indicates that contracting out does not save money when faced with actual cost numbers as opposed to the usual "estimate to estimate" savings rhetoric.

Expanding the A-76 Program

Even in light of these cost control problems, the Administration is clearly dedicated to expanding the contracting out program. . .or what some call "Government by Bid." Recent announcements call for a massive push to contract out services in the Veterans Administration Medical Centers. This effort includes the hospital canteen food service that operates from a non-appropriated trust fund. Therefore, implementing such a program runs the risk of requiring appropriated funds for an activity that hasn't received annual budget dollars since 1946. This is an example of the economic blindness that permeates the contracting out push centered in OMB A-76.

Conclusion and Recommendations

While there is no Congressional policy on contracting-out, AFGE does not oppose a policy by which the Federal government, with adequate protection for the principle of good government and other established government objectives, procures appropriate services on the basis of cost efficiency. AFGE is sure that Federal employees can perform the services of government more economically than private corporations.

At the same time, we are convinced that the public is not being told the full story on the cost of contracting out. It is essential that the Office of Management and Budget make available detailed cost data on each specific contract so that the public can see original estimated contractor bids and annual payments on the contract period. We also strongly recommend the actual cost of the A-76 program be reviewed as a line item in the budget process.

We also call for careful review of all proposals to expand contracting out in such agencies as the VA and SSA.

In summary, the American Federation of Government Employees is convinced that current contracting out practices, carried out under OMB Circular A-76, are adversely affecting good government today and are hurtling us toward future chaos of government operation. The time has come for Congress to act in this area by freezing or reducing spending on contracting out, bringing forth actual cost data, and developing comprehensive legislation to insure that this program is implemented in a cost effective and efficient way.

Table 1

Conversions to Contract
Comparison of Original Cost Estimates with Revised In-House and Actual Costs

($ in thousands)

	Army	Navy*	Air Force	DOD Total
A. *Original Cost Estimates*				
1. In-house performance costs	527,772	25,914	485,347	1,039,033
2. Contract performance costs	450,795	19,134	319,909	789,838
3. Cost advantage (line 1 minus line 2)	76,977	6,780	165,438	249,195
4. Percent of cost advantage to in-house cost (line 3 divided by line 1)	15%	26%	34%	24%
B. *Revised in-house cost estimate/actual contract costs*				
5. In-house revised estimates 1/	579,590	27,893	524,617	1,128,100
6. Actual contract costs	505,463	21,862	351,265	878,590
7. Cost advantage (line 5 minus line 6)	70,127	6,031	173,352	249,510
8. Percent of cost advantage to in-house cost (line 3 divided by line 1)	12%	22%	33%	22%

* Includes Marine Corps.

1/ This revised estimate reflects changes in the scope of work not reflected in the origina estimate and wage rate increases that would have occurred had the work bee accomplished.

ATTACHMENT 1

DEPARTMENT OF DEFENSE

CONTRACTING OUT COSTS
COMPARISON OF ORIGINAL CONTRACTOR COST ESTIMATES
WITH ACTUAL CONTRACTOR COSTS
BETWEEN OCT. 1980 and OCT. 1982 *

($ in Thousands)

	ARMY	NAVY	AIR FORCE	DOD TOTAL
A. Original Cost Estimates				
1. Contractor Performance Costs	450,795	19,134	319, 909	789,838
B. Actual Payments				
1. Actual Contract Costs	505,463	21,862	351,265	878,590
C. Cost Overruns	54,668	2,728	31,265	88,752
D. % Cost Overrun	12%	16%	10%	11.4%

* Cost data from DOD study submitted in accordance with 1984 DOD Authorization Act (Public Law 98-94); 235 contracts awarded during period; does not include contracts in effect prior to this period.

AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES

ATTACHMENT 2

CONTRACTING OUT COST OVERRUNS

AGENCY	LOCATION	CONTRACTOR BID	ACTUAL PAYMENT	$ COST OVERRUN	% COST OVERRUN
Army	Warren, MI	$ 6.9M	$10.9M	$ 4.0M	57%
Army	Southeast Region (AL and GA)	$13.2M	$19.3M	$ 6.1M	46%
Army	Ft. Dix, NJ	$ 2.2M	$ 3.7M	$ 1.5M	68%
Army	St. Louis, MO	$ 6.7M	$ 8.7M	$ 2.0M	30%
Army	Sharpe Depot, CA	$ 4.2M	$ 7.0M	$ 2.8M	67%
Army	Tobyhanna Depot, PA	$ .8M	$ 1.2M	$ .4M	50%
Navy (Marines)	Beaufort, SC	$ .9M	$ 1.5M	$ .6M	67%
Air Force	Kelly AFB, TX	$ 2.1M	$ 4.1M	$ 2.0M	95%
Air Force	Warner-Robins, GA	$ 2.4M	$ 4.2M	$ 1.8M	75%
Air Force	Richards-Gebaur AFB, MO	$ 4.8M	$ 9.8M	$ 5.0M	104%
TOTALS		$44.2M	$70.4M	$26.2M	59%

Source - GAO Reports and Military Service Correspondence

ATTACHMENT 3

CURRENT ISSUES IN ARMY REPORT

-- The objectives and goals of the A-76 program cause confusion and inefficiency.

-- The system currently in place that identifies and measures savings is suspect.

-- Costs associated with contracting-out are escalating primarily because of poorly written Performance Work Statements. . .

-- Current implementation of the A-76 program is inconsistent and inefficient. . .the program is floundering.

-- Over half of the PWS's reviewed had not been prepared IAW OFPP #4.

-- The validity of the $244 Million in savings reportedly generated by the A-76 program is highly suspect.

-- The savings that are reported are based on a one-time "snapshot" when the decision is made. . .subsequent cost escalations are not considered.

ATTACHMENT 4

Mr. **Price**. Thank you, Mr. Edgell. We now hear from a witness speaking on behalf of the Association of Research Libraries, Mr. James Wyatt, the Director of the University of Rochester Libraries.

Mr. Wyatt, we are glad to have you here.

Mr. **Wyatt**. Thank you, very much, sir. I am pleased to be in Washington for a second time to speak on this issue of privatization of the National Technical Information Service.

I would like entered into the record the statement prepared and submitted prior to this meeting to the Committee. The points that we wish covered are basically in that statement, although a few have come today which I will touch on now.

We are deeply concerned about the move to privatize the NTIS. The 118 academic and research libraries of the Association of Research Libraries are all depository accounts at NTIS, and purchase several million dollars worth of services and products from that organization each year.

We are essentially pleased with the service that we have had over the years, and do not wish to see any disruption of that and would prefer to see that it be improved and expanded, both by NTIS, itself, and by NTIS, perhaps in partnership with private sector for value-added products.

We are particularly concerned with privatization, should there be a failure to include documents of low sales potential, particularly in currently emerging fields. We find in many of those areas few scientists working on very select and esoteric subjects. However, those subjects may emerge at any time to be ones of great importance.

Many of the NTIS documents are very low-circulation documents and are not in themselves profitable or even cost effective. Their cost is covered by those other documents that sell in larger numbers.

We find it difficult to believe that the private sector would continue to publish documents and reports that are not in themselves profitable. We fear the loss of the permanent archival collection of older reports.

As has been stated here before, those older reports often emerge again, and we will see I think many of those emerging in the coming days as the petroleum and energy situation worsens.

We definitely fear the loss of foreign research reports. We are very much dependent upon the NTIS for much of our information from foreign countries and I certainly applaud the NTIS seeking to increase its collection of Japanese documents and to translate those into English. Again, we need that service very much.

We are concerned about increased prices for documents, and by the establishment of proprietary rights by private firms over NTIS products which are created with public dollars and we believe to be public service information belonging to our public.

We are also deeply concerned over the efforts to restrict the flow of unclassified information, both public and private information, by the Defense Department. We are concerned with National security ourselves, as citizens, but we believe in most cases of these unclassified documents, that the public good is served by free access without restrictions to our citizens.

There is one particular item that I might mention that came up in Dr. Caponio's testimony this morning that I think might be looked at. The NTIS has served, by the action of the Congress many years ago, as an information utility providing the public service information that has been created in agencies and foreign documents to the American public, as well as to others.

It has been that one-stop data base source that has been mentioned before, which is very important to us, and in that case, as well as with the low circulations and the archival collection, serves a public utility for information services.

We think that is still a valid function for NTIS.

Now we see that the Office of Management of Budget, by OMB Circular, is seeking to rescind the Congressional action that established the NTIS in its present form.

I believe that the move to offer the NTIS to the public sector in its entirety, or any substantive part of the NTIS, may very well be illegal and that it needs Congressional action before such a move could be made.

We recommend that the NTIS be continued and that it continue to collect and publish its documents. We feel that the report offered by the task force recommending more negotiation and interaction with the for-profit sector, to increase value-added opportunities is good. We would welcome those value-added products and would buy them as we do value-added products to the Government Printing Office and Depository Programs.

We also recommend that the Congress, unless this action can be stopped here, form a task force to study the proper disposition of the NTIS; that it gain public reaction from all of the interested parties before any final decision is made.

Thank you.

[The prepared statement of Mr. Wyatt follows:]

Association of Research Libraries
27 New Hampshire Avenue, N.W., Washington, D.C. 20036 (202) 232-2466

Statement on Behalf of the Association of Research Libraries

By

James F. Wyatt

Director of Libraries

University of Rochester

Rochester, New York

Before the

Subcommittee on Science, Research and Technology

U.S. House of Representatives

on

The National Technical Information Service

March 4, 1987

Mr. Chairman and Members of the Subcommittee, this will mark the second time this academic year that I have come to Washington specifically to address a proposal to privatize the National Technical Information Service (NTIS). While I look upon these opportunities as privileges, it is strikingly odd that we find ourselves having to write and speak repeatedly against a proposal that just doesn't make sense. And I might add, a proposal that we have yet to hear anyone defend.

ARL and many, many others wrote the Commerce Department last May and June pointing out why the proposal to privatize NTIS didn't make sense. (All of these letters were compiled by NTIS and made available as publication PB86-211240.) Many of us attended a public meeting last July 30 to talk about how the proposal didn't make sense. However, in spite of this considerable public opposition and in spite of the report of the Commerce Department Task Force that reached the same conclusion, we see in the President's Budget proposal that in 1988 "the private sector will be given the opportunity to operate NTIS on contract."

Since OMB disregards or dismisses the arguments we and others put forth last year, we appeal to Congress to take whatever action is necessary to preserve the features of NTIS that are essential for the effective transfer of scientific and technical information. These vital functions are:

- continued availability, free of any copyright restrictions, of federally funded reports;
- permanent availability of scientific and technical reports;
- a comprehensive and centralized source for timely identification and description of federally supported scientific and technical reports and the continued availability of this bibliographic information in the Depository Library Program; and,
- a centralized source for the sale of such reports at reasonable prices.

Any alternative to the current NTIS operations must preserve these functions. They are too important to the transfer of scientific and technical information to be sacrificed in order to entice private sector interest in performing NTIS responsibilities.

The National Technical Information Service (NTIS) was created within the Commerce Department to "make the results of technological research and development readily available to industry and business, and to the general public," so that this information could be used to stimulate productivity, competitiveness, and economic growth. For more than thirty years NTIS has successfully served those goals. Its services of collection, indexing and abstracting, and publication of research reports have met the needs of businesses, research laboratories, universities, other government agencies, and independent researchers and inventors.

By statute, NTIS is a self-supporting agency. It has not contributed to the climbing budget deficit and privatization of the operation will not contribute to a reduction of the deficit. (In fact, the Commerce Department Task Force report indicates that extensive privatization of NTIS would actually result in a net cost to the government.) Federal budget reduction is not an issue here.

User satisfaction with NTIS is high. This satisfaction is evident in the responses from all kinds of NTIS users to the request for public comment on the proposed privatization. NTIS services and publications are provided quickly, thoroughly, and, we believe, cost-effectively. Many U.S. businesses and all research universities are dependent upon NTIS for research reports, and any disruption in NTIS services would seriously hamper product development and further research.

We foresee no point in the future where the need for NTIS services will diminish. Long-term stability and consistency in operations is therefore another element that should be considered. We have confidence that the Government will still be in business 100 years from now; we are less optimistic about the longevity and stability of any private contractor service. Changes in NTIS service providors cause disruption and should be minimized to prevent interuption of service to users.

We are all concerned about the pressure to privatize NTIS. Those of us in research universities are especially worried that privatization will bring about

- the failure to include documents with low sales potential,
- the loss of a permanent, archival collection of older reports,
- the loss of many foreign research reports,
- increased prices for documents,
- establishment of proprietary rights over NTIS products,
- private self interested influence over the collections and services, and
- pressure to delete so-called "sensitive" information.

In addition, we believe that the Government has an important responsibility in the creation and dissemination of public service information and that a retreat from that role is a disservice to the nation. In this case, the disadvantages of privatization outweigh any advantages and do not serve the public weal.

Loss of low demand reports

While some NTIS reports sell in quantities large enough to return a profit for a commercial vendor, most sell only a few copies and would be considered unprofitable. The removal of those low demand reports from the clearinghouse would be devastating to research in many currently emerging fields. Their loss would be counterproductive, reducing private sector growth and productivity and inhibiting further research. The value of research reports is not measured in publication profits and number of copies sold, but rather in product development and new research initiatives.

Importance of a Permanent, Archival Collection

The permanent availability of reports in the NTIS system is essential and under no circumstance should this function be allowed to be degraded or dissolved. The research process proceeds by building on the results of previous work. Loss of access to any portion of the results of U.S. research efforts that is currently reflected in the NTIS system would be a step of serious consequences. This permanent availability service also serves other federal agencies and saves the government money as its existence eliminates the need for all but the largest agency to maintain its own document inventory. The collection built by NTIS is unique, of considerable value to the nation, and its continued development and maintenance is a responsibility that must be preserved.

Loss of Foreign Government Agreements

It is expected that of the 35 agreements NTIS has with foreign governments to provide reports to NTIS, few would continue to do so under privatization. This would be a major loss to U.S. information consumers, and probably not replaceable by any other organization or program. The loss of access to foreign research reports would hamper American efforts to reestablish strong, competitive positions in international markets.

Price Increases

It is unrealistic to expect that a privatized NTIS would not result in increased prices for NTIS reports and services. The profits are just not there unless the low sales items, archival documents, and other important functions are dropped. Business Week recently described the skyrocketing prices charged for government information when companies have been awarded a dissemination monopoly ("Computerizing Uncle Sam's Data: Oh How the Public is Paying," Business Week, December 15, 1986, pp. 102 - 103).

Higher prices place yet another inhibition on both further research and productivity. The universities and small businesses of the country cannot easily increase budgets to cover additional costs. The result will be the purchase and dissemination of fewer documents, a direct contradiction of the purpose of NTIS.

Proprietary Rights to Public Information

By allowing private sector organizations to assume the information dissemination functions of a government agency, the contractor gains a proprietary right to the information. When government contracts out a function that involves the collection or creation of information, that information is owned by the contractor. Such a situation arose in a 1980 Supreme Court case (Forsham vs. Harris 445 US 169) concerning use of the Freedom of Information Act (FOIA). The court held that the contractor owned the information even though the activities which generated the information were statutory duties of the government. The result was that the information was not available under the FOIA. Operating NTIS under contract could result in allowing a private firm to exercise proprietary rights over public domain information.

The Congressional Depository Library Program administered by the Government Printing Office serves to assure that there are no-fee sources of government information available in each Congressional district. Many depository libraries receive publications of NTIS, such as Government Reports Announcements & Indexes, through the Depository Library Program and serve as convenient locations for thousands of people to use these publications and gain access to the collections and services of

NTIS. Continued availability of GRA & I, as well as other NTIS publications, in the Depository Program is an essential feature and must be preserved.

In light of the court decision referred to above, we question if privatized NTIS publications, like GRA & I, would be defined as government publications. If not, they would cease to be made available to depository libraries and many, many channels of access would be eliminated. Access to the NTIS database would be restricted to those libraries and users that could afford to pay the contractor price for access.

Private Influence over NTIS Products and Services

Proprietary influence could also extend into decisions concerning the scope of the collection and the timeliness of delivery of services. Placing monopoly control of a large collection of scientific and technical information within the jurisdiction of any private entity that could be susceptible to self interested influences is not in the best interest of the country. It is only in the best interest of the contractor and affiliated firms.

"Sensitive" Information in NTIS

We understand that foreign access to the NTIS database is a matter of considerable concern to the Defense Department and other intelligence agencies. In recent years new policies and procedures have been established to improve computer security and control over unclassified but "sensitive" government information. In addition, representatives of the Department of Defense, Central Intelligence Agency, and the Federal Bureau of Investigation have visited private information companies inquiring about: a list of the users of their online databases, addresses of their users, and installation of monitors on the communication systems to track usage. At least one academic library, the State University of New York at Buffalo, was served with a subpoena by the FBI to divulge information about a database search performed for a foreign student.

Mead Data Corporation, one of the private firms that received repeated visits from government representatives, has announced that as a result of the visits they decided to exclude the NTIS database from their service. This is disturbing news as it eliminates an important channel of access to this information. While there are alternative ways users may gain access to reports in the clearinghouse, dimunition of channels is to be avoided especially when it comes as a result of government pressure.

ARL is committed to the principle that unrestricted access to the dissemination of ideas is fundamental to a democratic society. We also recognize that legitimate principles of national security exist side-by-side with the principle of unrestricted access and conclude that unrestricted access must take precedence unless a clear and public case can be made for restricting access in specific instances or to a clearly defined body of information.

To our knowledge no public case has been made to defend the placement of any restrictions on access to information in unclassified databases and we encourage the Subcommittee to seek further clarification of the intentions of the Defense Department especially in regard to the NTIS database.

It is possible that the plans of the Defense Department to control access to the NTIS database have not been coordinated with the plans of OMB to privatize the operation. However, it is also possible that the two initiatives operate in tandem. Planned or not, the pressures from both Defense and OMB could lead to large amounts of unclassified information excluded from the database and therefore unavailable to everyone because it is too "sensitive" to be outside the hands of the government.

In fact, privatization raises serious questions of foreign influence over the clearinghouse since many information sector firms are owned and controlled by foreign corporations. Under present U.S. contracting procedures, there is nothing to prevent a foreign owned firm from bidding on the contract to operate NTIS. Also, there is nothing to prevent a foreign takeover of a U.S. firm that has already won a contract to operate a federal information operation.

Failure to Realize Privatization Goals

We believe that privatization of NTIS does not substantively accomplish any privatization goals. As noted by the Commerce Department Privatization Task Force, no private contractor has come forward or showed any interest in buying NTIS. In fact, most of the opportunities for private sector information firms to make profits using NTIS materials is in the "value added" area -- and those opportunities are present under the current system. Failure to seize them is due to lack of entrepreneurship, the uncertain size of profits, their fear of NTIS or some other private firm competition, etc., but is not due to lack of opportunity.

Privatization of NTIS will not stimulate productivity, competitiveness, or growth of American industry and research - rather it will have the opposite effect. The fact is that NTIS has and does, as presently constituted accomplish those ends more effectively and cost-efficiently than can private sources. It may be possible to add to NTIS operations other services that will enhance its capacity to serve these goals, and that some programs may involve private sector firms as contractors for value-added products. As clients, we would welcome these kinds of products and purchase them as we do other "for profit" services offered by publishers.

Opposition to Privatization of Government Information Services

As institutions that create information for the benefit of humanity, sometimes in partnership with the Government, and as loyal citizens, we object to the privatization/commercialization of information created with public funds. We believe that such information is in the public domain, should stay there, and be equitably accessible for public use, by individuals, business firms, government agencies, and universities. We in libraries are partners with the Government through NTIS, GPO, and other federal agencies in pursuing the goal of equitable access — one of the most essential to a free society. Privatization of public information strikes a blow against the foundation of this free society and we oppose it vigorously. It is entirely inappropriate to take steps that will lead to restricting this country's citizens' access to their own public information.

ARL believes that privatization of NTIS will not result in the supposed benefits of privatization, but rather will result in limited service at higher costs and the loss of many low volume, archival, and foreign reports. We also anticipate the real possibility of loss of public domain information and undue private influence over scientific and technical information. American industry and research will be poorly served and our economic development hampered. The American public will see information created with its tax dollars given exclusively to private sector firms for resale at profit-making levels.

Future of NTIS

NTIS should continue to collect, publish, and archive research reports for the benefit of the country. It should continue to provide and to increase opportunities for private sector firms to develop value-added services and products to make public information more accessible to the public. It should continue to be self-supporting. It should be innovative in its methods and comprehensive in its collection of documents. While not organizationally related, NTIS and GPO should cooperate whenever it is advantageous to the public. NTIS should also seek cooperative ventures with organizations such as research libraries, and should have some structure, such as an advisory committee, to collect in a regular and formal manner, feedback and information on operations, services, publications, formats, and the like. NTIS should continue and expand its capacity to collect, translate and publish foreign research reports.

If Congress concludes it is necessary to make an in depth assessment of alternatives to the present structure of NTIS, ARL recommends the establishment of a Congressional task force or advisory group to carry out a public review of how the results of federally funded research and development reports could most effectively be transferred from government to users. All stakeholders need to participate. The Association of Research Libraries and other groups will, I am certain, be cooperative and active participants in such a review.

Thank you for this opportunity to appear here today.

06801

James F. Wyatt
Witness for the Association of Research Libraries

James F. Wyatt is Director of Libraries at the University of Rochester in Rochester, New York. Dr. Wyatt's graduate study was at the University of North Carolina and Flordia State University. He currently serves as a member of the Board of Governors of the Reseach Libraries Group, Inc. a partnership of major universities and research institutions in the United States, and as chair of ARL's Government Policies Committee.

The Association of Research Libraries (ARL) comprises the 118 largest academic and other research libraries in the United States and Canada. It is a non-profit organization founded in 1932 to assist member libraries to better meet the ever-increasing demands for their services. A list of ARL member institutions appears on the reverse side of this page.

0681I

Membership of the Association of Research Libraries

National Libraries:
- Canada Institute for Scientific and Technical Information
- Library of Congress
- National Agricultural Library
- National Library of Canada
- National Library of Medicine

Special Libraries:
- Center for Research Libraries
- Linda Hall Library
- Smithsonian Institution Libraries

Public Libraries:
- Boston Public Library
- New York Public Library
- New York State Library

University Libraries:

- Alabama
- Alberta
- Arizona
- Arizona State
- Boston
- Brigham Young
- British Columbia
- Brown
- Calif., Berkeley
- Calif., Davis
- Calif., Irvine
- Calif., Los Angeles
- Calif., Riverside
- Calif., San Diego
- Calif., Santa Barbara
- Case Western Reserve
- Chicago
- Cincinnati
- Colorado
- Colorado State
- Columbia
- Connecticut
- Cornell
- Dartmouth
- Delaware
- Duke
- Emory
- Florida
- Florida State
- Georgetown
- Georgia
- Georgia Inst. of Tech.
- Guelph
- Harvard
- Hawaii
- Houston
- Howard
- Illinois
- Indiana
- Iowa
- Iowa State
- Johns Hopkins
- Kansas
- Kentucky
- Kent State
- Laval
- Louisiana State
- McGill
- McMaster
- Manitoba
- Maryland
- Massachusetts
- Mass. Inst. of Tech.
- Miami
- Michigan
- Michigan State
- Minnesota
- Missouri
- Nebraska
- New Mexico
- New York
- North Carolina
- North Carolina State
- Northwestern
- Notre Dame
- Ohio State
- Oklahoma
- Oklahoma State
- Oregon
- Pennsylvania
- Pennsylvania State
- Pittsburgh
- Princeton
- Purdue
- Queen's
- Rice
- Rochester
- Rutgers
- Saskatchewan
- South Carolina
- Southern California
- Southern Illinois
- Stanford
- SUNY Albany
- SUNY Buffalo
- SUNY Stony Brook
- Syracuse
- Temple
- Tennessee
- Texas
- Texas A&M
- Toronto
- Tulane
- Utah
- Vanderbilt
- Virginia
- Virginia Poly.
- Washington
- Washington State
- Washington, St. Louis
- Waterloo
- Wayne State
- Western Ontario
- Wisconsin
- Yale
- York

0272K

Information Processing

INFORMATION MANAGEMENT

COMPUTERIZING UNCLE SAM'S DATA: OH, HOW THE PUBLIC IS PAYING

GIVING THE PRIVATE SECTOR THE JOB HAS LED TO HIGHER FEES FOR THE INFORMATION

It seemed like a good idea at the time. When the Reagan Administration began its push to transform the government into a paperless bureaucracy six years ago, it turned to the private sector. Officials figured that private companies would agree to set up new computer-information systems for free, recouping their costs by selling government data to the public. That meshed perfectly with the Administration's twin aims of holding down expenditures while halting services that business could offer. The White House also thought a more efficient private sector could provide those services for less.

But as Administration free-marketers like to say, there's no free lunch. In some cases, information companies are balking at computerizing the government's record systems without assurances that they'll recover their expenses. And those assurances are hard to make because government data can't be copyrighted: There's nothing to prevent competitors from buying the government information from the new provider and reselling it at a lower price.

The biggest problem, however, may be that in those cases where the government has induced a company to step in by awarding it a monopoly, prices have skyrocketed. "We haven't seen any example yet where it's been less expensive than when it's been handled by the public sector," complains Anne A. Heanue, associate director of the Washington office of the American Library Assn.

'REALLY TICKLISH.' Administration officials defend the higher prices, contending that new sellers usually enhance government information or put it in a form that's easier to use. But critics argue that a system of data haves and have-nots is being created: Big-business customers can afford to buy while libraries, students, and others cannot. While that dispute rages on, both Congress and the Office of Management & Budget concede that more work needs to be done on finding the best way to computerize government services while guaranteeing public access.

Federal agencies have little choice but to automate. The Patent & Trademark Office, for example, keeps 27 million documents on hand to check patent applications, and officials say that 300,000 or more of them may be lost at any time. The Securities & Exchange Commission takes in 6 million pages of filings a year. "There's a big internal management incentive" to computerize, says Timothy Sprehe, senior policy analyst at the OMB's Office of Information & Regulatory Affairs. "The really ticklish part is when they try to get the private sector to pay for it."

Consider the SEC's effort to develop its Electronic Data Gathering Analysis & Retrieval (EDGAR) system. The SEC wanted a computer system that would let companies file reports electronically. It stipulated that bidders couldn't use existing computer capacity but had to set up a new system, give the SEC access to it gratis, and recoup costs by selling information to the public.

But potential bidders, put off by uncertainties about the demand for such data and facing estimated startup costs of up to $100 million, refused to participate. The SEC has now stretched the deadline for bids from Sept. 10 to Dec. 31. Industry officials say it also has increased the likelihood of bids by agreeing to fork over $46.5 million to help build a new system and by allowing contractors to use existing computers.

DROPPING OUT. If track records at other agencies are any indication, customers will be paying through the nose once EDGAR finally comes on line. At the Agriculture Dept., for instance, costs have soared in the two years since Martin Marietta Corp. got exclusive rights to the mounds of farm data the department gathers.

Before the contract, customers of the University of Nebraska's nonprofit Agnet data base—ranging from small farmers to Coca-Cola and Quaker Oats—could tap into the data for a flat fee of $60 a year, plus $40 for each hour they

THE PRICE OF PRIVATIZED INFORMATION

Service	Government provider	Direct cost	New provider	New cost
Agricultural data bases	Agriculture Dept.*	$60/year +$42/hour	Martin Marietta or Dialog	$1,800/year** $25/year +$96/hour
Medline	National Library of Medicine (NIH)	$15-$22/hour	Mead Data Central	$50 registration fee +$10/month +$30/hour***
Federal election filing data base	Federal Election Commission	$22/hour or $1,000/month (unlimited access)	Washington-on-Line (McClatchy Newspapers)	$4,000/year (unlimited access)

*No longer providing the service directly **$12 hourly surcharge after 150 hours ***Includes additional information spent perusing the data. Now customers pay a minimum of $1,800 a year, plus $12 an hour for any use above 150 hours (chart). While big customers will benefit, individuals and occasional customers such as Quaker Oats are unhappy with the price increases. Granted, they will be able to avoid the hefty minimum by getting the information through Lockheed Corp.'s Dialog electronic information service, which buys it from Martin Marietta and resells it for a $25-a-year fee and a $96 hourly charge. But that still is much more expensive than Agnet was. Meanwhile, Agnet has dropped the agriculture service because it cannot pay for the data without raising its fees.

Such examples have stirred opposition on Capitol Hill to the privatization drive. In October, Congress passed legislation forcing the Patent Office to renegotiate agreements it had made to computerize its trademark operation. Under those arrangements, N.V. Compu-Mark and Thomson & Thomson, two trademark search firms, were to upgrade the trademark system and provide the Patent Office with sophisticated software to search the data—all at no charge to the agency. In return, the Patent Office would force the public to use the companies for computerized searches of its files of 600,000 trademarks—at $70 an hour. In effect, the agency's clients were financing its new computer system.

A report by the House Government Operations Committee concluded that the Patent Office put budget concerns and the office's own needs ahead of the public interest. It also concluded that the agency had let the contractors reap windfall profits of $3.2 million.

'SHELL GAMES.' Even companies that might benefit from a monopoly contract are concerned about the lack of checks on profiteering because they frequently use data provided by other companies. "The contractor often thinks that this is the golden goose, and he can pull all kinds of profit out of it," says a source at a major publishing company.

Critics of high-priced government information are starting to force changes. In the future, agencies probably will have to finance new information systems out of their own budgets, as the SEC plans to do, and contractors will bear only the expense of disseminating data. Still, there's no guarantee that having private companies peddle government information will ever be cheaper than having agencies do it themselves. "It's one of those shell games," says Thomas P. Giammo, an associate director of the General Accounting Office who has looked at several electronic-conversion efforts for Congress. "It sounds free, but the public ends up paying for it one way or another."

By Frances Seghers in Washington

Mr. PRICE. Thank you, Mr. Wyatt.

We are pleased next to hear from Dr. Harold Seidman. Dr. Seidman has a distinguished career of public service, and also is well known as an academic expert on Government. I believe his classic treatment of bureaucratic politics, "Politics, Position and Power" has recently gone into its third edition.

Dr. SEIDMAN. Fourth. It remains ahead of Aristotle.

Mr. PRICE. Dr. Seidman today is appearing as Chairman of the National Academy of Public Administration's Panel on NTIS. We are very pleased to welcome him here.

Dr. SEIDMAN. Before making my formal statement, I thought I would make a brief comment on some of the testimony I have heard about contracting out.

I think my former colleagues at OMB would be well advised to go back and read Adam Smith on this subject, who I guess is the godfather of privatization. Adam Smith was talking about the-then practice of contracting out for the collection of taxes by tax farmers. He said any government could collect taxes more efficiently by administration of its own choosing, and at least would save the profit which is always exorbitant.

Mr. Chairman, I am pleased to accept your invitation to present the views of the Panel of the National Academy of Public Administration on the organization of the National Technical Information Service.

An advance copy of the Panel Report, "An Assessment of Alternative Organizational Structures for the National Technical Information Service" has been made available to your Committee.

The National Academy of Public Administration is a non-partisan organization, formed in 1967, to advance the effectiveness of public management through advice and counsel to all levels of Government.

The Academy members, elected by their peers, consist of distinguished practitioners and scholars throughout the country. In 1984, the Academy was chartered by Act of Congress, the first such charter granted by Congress since the Charter for the National Academy of Sciences in 1986.

The Panel to study the National Technical Information Service, which I had the honor to chair, consisted of William Carey, Executive Director, American Association for the Advancement of Science; Alan Dean, former Vice President, U.S. Railway Association and Assistant Secretary for Administration, Department of Transportation; and Dr. Martin Cummings, former Director, National Library of Medicine.

As Government corporation specialist and later Assistant Director for Management and Organization of the Bureau of the Budget, I was responsible for implementation of the Government Corporation Control Act, and I might also add for administration of Circular A-76, and advice to the President on the Organization and Management of executive branch agencies.

I might say, when I was responsible for A-76, it would have been unthinkable to have recommended the contracting out of the National Technical Information Service.

After assessing several organizational alternatives, the Panel unanimously concluded that the goals established by Congress for the NTIS could be accomplished most effectively by establishment of a Government corporation.

When it enacted the Government Control Act of 1945, the Congress recognized the need to distinguish between revenue producing and self-sustaining public enterprises and programs financed by taxes.

The Act was intended to establish consistent treatment and appropriate accountability and control of revenue-producing enterprises organized as government corporations and to assure that such enterprises could operate with reasonable autonomy and flexibility in carrying out authorized programs.

The Academy is not advocating special treatment for NTIS, but equal treatment. NTIS fully meets the established criteria for use of a government corporation: it is revenue-producing and self-supporting; it conducts a large number of business transactions with the public; it is subject to market discipline and requires flexibility to develop its market and to respond effectively to market demand.

Yet at present, NTIS is denied the flexibility accorded comparable Federal enterprises, and is compelled to operate under laws and regulations designed for traditional tax-financed programs.

I think this is a source, Mr. Chairman, for part of the confusion in OMB today; they are thinking of NTIS as if it were a tax-supported program, which it is not.

These laws and regulations hamper operations without providing effective accountability, either through the President or to the Congress.

The Panel identified a number of problems NTIS now faces in carrying out its varied responsibilities. These relate primarily to funding, financial control, position ceilings, administrative regulations, and buildings management. Each of these problems is discussed in the report.

Unlike comparable government activities, the NTIS is not financed by a public enterprise revolving fund. Funding provisions included in the NTIS enabling statute do not adequately define the extent or limits of NTIS' discretion in utilizing its receipts. Questions have been raised by both GAO and OMB about the use of escrow funds to finance operations. There is also no explicit authority to use available funds in its account for capital expenditures.

NTIS maintains a business type budget for its internal use, but its budget is presented to OMB and the Congress in accordance with rules and regulations applicable to agencies financed entirely by appropriated funds. NTIS now has to maintain two systems of accounts; one a cash-based system in compliance with OMB Circular A–34; and an accrual-based system to provide a more accurate measure of its financial performance.

The accounts of Government corporations are audited by the General Accounting Office, or independent accountants, in accordance with principles and procedures applicable to commercial corporate transactions. There is no specific statutory provision for an independent commercial audit of NTIS or requirement for submission of an audit report to the Congress.

NTIS maintains on the average, $9 million in its trust fund, but unlike most comparable agencies, it is not authorized to invest the surplus in U.S. Government obligations. At present, NTIS and its users are, in effect, compelled to subsidize the Treasury which has interest-free use of the money.

Imposition of inappropriate laws and regulations on the NTIS, such as personnel ceilings, surcharges for space leased by the General Service Administration, etcetera, inevitably impose higher costs on the users of its services without compensating benefits.

Information produced by Government-sponsored research and reports of this research are a valuable National resource. The Panel strongly believes that any measures which would tend to limit access to such information, or reduce the availability of reports, would not be in the National interest.

We urge that legislation be enacted to redefine NTIS' mission and the critical role of the clearinghouse in facilitating technology transfer and assisting in the development of the United States industry and maintenance of a competitive edge in world markets.

The Panel recognizes that incorporation would not solve all of NTIS' problems. We are convinced, however, that restructuring of NTIS as a Government corporation, under the direction and supervision of the Secretary of Commerce, will provide the organization structure best adapted to its role and mission.

It will enable NTIS to improve services to its customers, to operate in a cost effective and efficient manner without in any way impairing essential accountability to the Congress.

Thank you.

[The prepared statement of Dr. Seidman follows:]

STATEMENT OF HAROLD SEIDMAN, CHAIRMAN, NTIS PANEL, NATIONAL ACADEMY OF PUBLIC ADMINISTRATION, BEFORE THE SUBCOMMITTEE ON SCIENCE RESEARCH AND TECHNOLOGY OF THE HOUSE COMMITTEE ON SCIENCE, SPACE AND TECHNOLOGY ON PRIVATIZATION OF THE NATIONAL TECHNICAL INFORMATION SERVICE MARCH 4, 1987

Mr. Chairman and members of the Subcommittee:

I an pleased to accept the invitation of your committee to present the views of a panel of the National Academy of public Administration on the organization of the National Technical Information Service. A copy of the panel report. "An Assessment of Alternative Organizational Structures for the National Technical Information Service," has been made available to the committee.

The National Academy of Public Administration is a nonpartisan organization formed in 1967 to advance the effectiveness of public management through advice and counsel to all levels of government. The Academy members, elected by their peers, consist of distinguished practitioners and scholars throughout the country. In 1984 the Academy was chartered by act of the congress, the first such charter granted by congress since the charter for the National Academy of Sciences in 1863.

The panel to study the National Technical Information Service, which I had the honor to chair, consisted of William Carey, Executive Director, American Association for the Advancement of Science, Alan Dean, former Vice President, U.S. Railway Association and Assistant Secretary for Administration, Department of Transportation, and Dr. Martin Cummings, former director, National Library of Medicine. As government corporation specialist and later Assistant Director for Management and Organization of the Bureau of the Budget, I was responsible for implementation of the Government Corporation Control Act and advice to the

President on the Organization and Management of executive branch agencies. After assessing several organizational alternatives, the panel unanimously concluded that the goals established by the Congress for the NTIS could be accomplished most effectively by establishment of a government corporation.

When it enacted the Government Corporation Control Act of 1945, the Congress recognized the need to distinguish between revenue producing and self-sustaining public enterprises and programs financed by taxes. The act was intended to establish consistent treatment and appropriate accountability and control of revenue producing enterprises organized as government corporations and to assure that such enterprises could operate with "reasonable autonomy and flexibility" in carrying out authorized programs.

The Academy panel is not advocating special treatment for NTIS, but equal treatment. NTIS fully meets the established criteria for use of a government corporation: (1) it is revenue producing and self-supporting; (2) it conducts a large number of business transactions with the public; and (3) it is subject to market discipline and requires flexibility to develop its market and to respond effectively to market demand. Yet at present NTIS is denied the flexibility accorded comparable federal enterprises and is compelled to operate under laws and regulations designed for traditional tax financed programs. These laws and regulations hamper operations without providing effective accountability either to the President or the Congress.

The panel identified a number of problems NTIS now faces in carrying out its varied responsibilities. These relate primarily to funding, financial controls, position ceilings, administrative regulations, and buildings management. Each of these problems is discussed in the panel report.

Unlike comparable government activities, the NTIS is not financed by a public enterprise revolving fund. Funding provisions included in the NTIS enabling statute do not adequately define the extent or limits of NTIS' discretion in utilizing its receipts. Questions have been raised about the use of escrow funds to finance operations. There is also no explicit authority to use available funds in its account for capital expenditures.

NTIS maintains a business type budget for its internal use, but its budget is presented to OMB and the Congress in accordance with rules and regulations applicable to agencies financed entirely by appropriated funds. NTIS now has to maintain two systems of accounts - one a cash-based system in compliance with OMB circular A-34, and accrual-based system to provide a more accurate measure of its financial performance.

The accounts of government corporations are audited by the General Accounting Office or independent accountants in accordance with principles and procedures applicable to commercial corporate transactions. There is no specific statutory provision for an independent commercial audit of NTIS or requirement for submission of an audit report to the Congress.

NTIS maintains, on the average, $9 million in its trust fund, but unlike most comparable agencies, it is not authorized to invest the surplus in U.S. government obligations. At present NTIS and its users are, in effect, compelled to subsidize the Treasury which has interest free use of the money.

Imposition of inappropriate laws and regulations on the NTIS, such as personnel ceilings, surcharges for space leased by the General Service Administration etc. inevitably impose higher costs on the users of its services without compensating benefits.

Information produced by government sponsored research and reports of this research are a valuable national resource. The panel strongly believes that any measures which would tend to limit access to such information or reduce the availability of reports would not be in the national interest. We urge that legislation be enacted to redefine NTIS' mission and the critical role of the clearinghouse in facilitating technology transfer and assisting in the development of United States industry and maintenance of a competitive edge in world markets.

The panel recognizes that incorporation would not solve all of NTIS' problems. We are convinced, however, that restructuring of the NTIS as a government corporation under the direction and supervision of the Secretary of Commerce will provide the organization structure best adapted to its role and mission. It will enable NTIS to improve services to its customers and to operate in a cost effective and efficient manner without in any way impairing essential accountability to the Congress.

NAPA
National Academy of Public Administration

AN ASSESSMENT OF ALTERNATIVE ORGANIZATIONAL STRUCTURES FOR THE NATIONAL TECHNICAL INFORMATION SERVICE

A Report by
a Panel of the
National Academy of
Public Administration

Panel Members

Harold Seidman, *Chairman*
William D. Carey
Alan L. Dean
Martin M. Cummings

NATIONAL ACADEMY OF PUBLIC ADMINISTRATION

An Assessment of Alternative Organizational Structures for the National Technical Information Service

A Report by a Panel
of the National Academy of Public Administration

February 1987

NATIONAL ACADEMY OF PUBLIC ADMINISTRATION

Officers of the National Academy

Mark E. Keane, Chairman of the Board
Robert P. Biller, Vice Chairman
Ray Kline, President
Sheldon S. Cohen, Secretary
Elsa A. Porter, Treasurer

Academy Studies

Paul C. Light, Director of Academy Studies
Lynda K. Langely, Administrative Officer

National Academy Panel on An Assessment of Alternative Organizational Structures for the National Technical Information Service

Harold Seidman, Guest Scholar, The Brookings Institution
William Carey, Executive Director, American Association for the Advancement of Science
Alan Dean, Consultant; Former Vice President, U.S. Railway Association
Martin Cummings, Former Director, National Library of Medicine

Project Staff

Janet Geffner, National Technical Information Services
Carole M.P. Neves, National Academy of Public Administration
Tina Y. Rutledge, Project Secretary

TABLE OF CONTENTS

Page

PREFACE 1

INTRODUCTION 2

PURPOSE OF THE STUDY 4

BACKGROUND 5

PROBLEM IDENTIFICATION 7

PREVIOUS ACTIONS AT NTIS 13

ALTERNATIVE APPROACHES 17

CONCLUSIONS AND RECOMMENDATIONS 22

ISSUES 25

PREFACE

Studying organizational structure and design for government agencies has been a central activity of the National Academy of Public Administration (NAPA) for the last decade. Over the years, the Academy has published several studies on organizational aspects of federal agencies. The present effort represents a comprehensive examination of organizational alternatives for the National Technical Information Service (NTIS). The Academy's goal, simply put, was to determine whether NTIS' current organizational structure is the most appropriate structure for accomplishing NTIS' mission in an efficient and cost-effective manner. A particular concern was the need to improve services in view of rapidly changing scientific and technological research.

In the discussion, the panel recognized that NTIS performs potentially self-sustaining commercial-type activities. This sets NTIS apart from traditional government agencies. After assessing several organizational alternatives, the panel concluded that NTIS meets the criteria for the establishment of a government corporation. Conversion of NTIS to a government corporation is a means of conserving NTIS' role of national importance as a clearinghouse for scientific and technical information in a dynamic competitive world market and of facilitating the transfer of knowledge from the government to the private sector.

Ray Kline
President

INTRODUCTION

This study developed out of the broader issue of whether or not to privatize all or some of the National Technical Information Service (NTIS). As part of the Reagan Administration's drive to reduce the size and cost of the federal government, the Office of Management and Budget directed the Department of Commerce to develop a privatization proposal for NTIS to be included in the 1988 budget.

NTIS asked the National Academy of Public Administration to examine several organizational alternatives, including the government corporation. In giving these options serious thought and consideration, the Academy concluded that NTIS is a distinctive kind of agency which meets the criteria of a government corporation.

To fulfill its obligation, the National Academy appointed a four member panel chaired by Dr. Harold Seidman. The staff consisted of Janet Geffner, National Technical Information Service and Carole M.P. Neves, the National Academy of Public Administration. The panel met four times over the course of the study and interviewed several NTIS staff members. In addition, there was frequent consultation between the NTIS staff and panel members during the course of the study and a number of secondary source documents was reviewed.

In the panel's view, NTIS conducts potentially self sustaining business-type activities of national importance. Although NTIS was not created to become a profit making entity, its activities have certain unique characteristics which set them apart from traditional government functions: (1) users bear the major share of the costs of goods and services; (2) expenditures necessarily fluctuate with consumer demand; and (3) operations are subject to market discipline.

While special acknowledgment must be given to staff of NTIS, whose contributions and assistance were helpful in the structuring of this study, the panel has the full responsibility for the contents of this study. The views, opinions and positions are theirs, and are firmly anchored in the experience of panel members and in their pragmatic views of organizational design.

PURPOSE OF THE STUDY

The National Technical Information Service (NTIS) collects scientific and technical reports from government agencies, their contractors and grantees, and sells these reports to the public at prices which enable NTIS to recover its costs. NTIS seeks to promote an increased demand for its products, to key its production to the level of demand, and to establish prices which will encourage sales and return sufficient revenue to recover costs. Because of the nature of its operation, and because of its legislated requirement to be self-sustaining, NTIS functions to a large extent like a government enterprise.

In carrying out its mission, NTIS functions as part of the regular, federal government agency system. Its commercial type operation, however, suggests that NTIS should have a greater degree of flexibility than is usually available to a traditional government agency. When it enacted the Government Corporation Control Act of 1945, the Congress recognized the need to distinguish between revenue producing and self-sustaining public enterprises and programs financed primarily by taxes. The purpose of this paper is to analyze whether NTIS' current organization arrangement is the most appropriate vehicle for accomplishing the goals set by Congress in an effective and efficient manner or whether another organizational form would be more appropriate.

This purpose dictated a request by NTIS to the National Academy of Public Administration to consider several alternative organizational structures for NTIS. In undertaking this work, the Academy convened a panel of specialists in public administration under the chairmanship of Dr. Harold Seidman. Other panel members were William Carey, Martin Cummings and Alan Dean.

BACKGROUND

NTIS operates under the authority of Title 15 of the United States Code, (1151-1157) as amended, which authorizes the Secretary of Commerce to establish a clearinghouse for the collection and dissemination of scientific, technical and engineering information and which requires that NTIS offer its products and services for sale on a self-supporting basis. Accordingly, NTIS recovers virtually all of its costs from sales revenue.

NTIS is a central source for the public sale of scientific, technical and engineering reports describing research done by federal agencies and their contractors/grantees, similar reports prepared by state and local governments, technical reports prepared by government research organizations in foreign countries, and Federally-generated, machine processable data files and software. The major activities associated with this clearinghouse function are acquisition of reports, files and software, establishment of bibliographic control and preparation of various index and abstract materials, maintenance of an archive, reproduction of reports and tape files, and operation of a sales and distribution program.

Representatives of governmental and private organizations acknowledge NTIS's critical role as a catalyst for innovation and change. For example, in 1986, The National Aeronautics and Space Administration (NASA) described the role of NTIS in the following way:

> Only NTIS has the potential for retaining an efficient and effective system to assure essentially permanent report availability to all U.S. citizens regardless of locality. That a complete, quick, and relatively inexpensive source for these reports is needed over the long term has been shown repeatedly in the intensely technological areas of aeronautics and space. Worldwide competition in these fields requires the U.S. to maintain an effective information infrastructure that will help avoid undesirable duplication and promote the highest R&D quality and timeliness in the private sector as well as in the public sector.

> Regarding the fundamental need for a consolidated permanent source of government and government-contractor reports, it is clear that technical reports, per se, are a vital part of the research and development process. As the number of scientific and technical efforts grow exponentially, old systems of relying largely on journal publication and meeting paper presentation are becoming less and less able to accommodate documentation needs. Only report literature like that compiled at NTIS, allows an unlimited number of pages for a researcher to document experiments and to record findings in the proper degree and without delay.

The NTIS program includes two additional operations: NTIS manages the Federal Government's most active patent licensing program and NTIS provides distribution and customer accounting services to other Federal agencies which benefit from the specialized staff and equipment resources required by the clearinghouse operation.

PROBLEM IDENTIFICATION

The panel identified a number of problems which NTIS faces in carrying out its varied responsibilities under laws and regulations designed for traditional government programs.

Funding

Federal funding provisions generally distinguish between programs financed primarily from taxes and those involving market-oriented transaction which are financed primarily by user charges. Trust funds are utilized for the administration of taxes or other receipts earmarked for specified purposes, such as payment of social security benefits, in accordance with the terms of a trust or statute. For revenue producing self-sustaining agencies such as NTIS which conduct a cycle of business operations with the public, the public enterprise revolving fund is now the accepted and preferred method of funding.

Unlike comparable government activities, the NTIS does not have a public enterprise revolving fund. Funding provisions included in NTIS enabling statute (15 USC 1526) are fragmentary and consequently do not adequately define the extent or limits of NTIS' discretion in utilizing its receipts. This has left NTIS vulnerable to questions about the use of its funds. NTIS enabling legislation (15 USC 1526) provides:

> All payments for work or services performed or to be performed under this Act shall be deposited in a separate account which may be used to pay directly the costs of such work or services....Provided, that said receipts may be credited to a working capital fund otherwise established by law, and used under the law governing said funds, if the fund is available for use by the agency of the Department of Commerce which is responsible for performing the work or services for which payment is received.

The Department of Commerce has interpreted this statute to mean that NTIS can use a working capital fund if it chooses, or can use other special accounts to pay for operating expenses. Since 1979, most NTIS operations have been financed through a Treasury-designated trust fund into which NTIS deposits cash receipts including escrow funds advanced by its customers to pay for future purchases. NTIS uses these escrow funds to finance operations.

The General Accounting Office (GAO) and the Office of Management and Budget (OMB) have suggested that such use of escrow funds is improper, that the trust fund has no legal authority to retain earnings to accumulate working capital; and that NTIS does not have explicit authority to use the trust fund for capital expenditures. In order to rectify this situation, NTIS, in 1983, sought legislation to establish a public enterprise revolving fund with authority to receive appropriations of $5 million for initial working capital. Both GAO and OMB supported this legislation, but it was not enacted by the Congress.

Although this legislation would have given NTIS explicit authority to operate the Clearinghouse under a revolving fund, GAO, in its Report to the Chairman, Committee on Energy and Commerce, U.S. House of Representatives, titled "Proposed National Technical Information Service Revolving Fund," arrived that NTIS operations would not be affected significantly because:

- NTIS has consistently used customer advances as working capital.
- NTIS has consistently used the fund to purchase equipment and inventory.
- NTIS had retained earnings in fiscal years 1980 and 1981.

Oversight

Although NTIS is a self-supporting agency, it is subject to the same oversight and management controls as an agency financed by appropriated funds. NTIS provides OMB and the Congress with the same program and financing schedule, object classification and personnel summary as do agencies receiving appropriated funds. The budget shows one activity only, the Information Clearinghouse. The present form of budget presentation does not provide as effective accountability to the Congress as the business type budget required by the Government Corporation Control Act. (See Appendix A.)

Because it is treated as a typical government agency, NTIS is subject to quarterly apportionments of its authority to spend. NTIS is authorized to obligate the lesser of the quarterly apportionment or actual receipts. Unlike typical agencies which can directly control their obligations, NTIS' costs are determined to a large extent by demand for its products and services. Prevalidation of all obligation documents to ensure that the quarterly apportionment is not exceeded causes additional recordkeeping for NTIS. More importantly, the restrictions imposed by the quarterly apportionment do not provide OMB with the control over NTIS obligations as they would with an agency operating with appropriated funds.

NTIS has to maintain two systems of accounts. In compliance with OMB Circular A-34, Budget Execution, NTIS maintains budgetary accounts in its trust fund general ledger in order to report obligations incurred against budget authority. This control, which is required by the Anti-deficiency Act, is designed to set limits on an agency's authority to incur obligations. This accounting method established a cash-based system, but the accounting profession does not consider the cash basis an acceptable accounting practice for business entities such as NTIS. The generally accepted method for such an operation is the accrual-based system that matches revenues earned against costs incurred during the period. The resulting net profit or loss provides a more accurate measure of financial performance than the information derived from the cash-based system.

In addition to maintaining obligation accounting records required by OMB, NTIS maintains the accrual accounting system needed to monitor its financial condition and establish rates and charges. As part of its planning process, NTIS prepares a business-type budget which balances projected revenues against costs. This budget contains a detailed statement of revenue and expenses. Once approved by the NTIS Director, the budget becomes the financial plan by which program managers monitor their costs. The budget is reviewed monthly to determine if revenues and costs are performing as anticipated, and if adjustments are needed. These monthly budget reports serve as the major indicators of NTIS' financial status.

NTIS also produces internal monthly trial balances and quarterly comparative balance sheets in order to measure the agency's overall performance. These reports show investments in equipment and inventory, receivables, debts, and the overall net worth of the organization. The income statement and the balance sheet are the true measures of NTIS' financial health, as they are for any business-oriented entity. They are the documents which provide the information necessary for effective oversight. The accounts of government corporations are audited by the General Accounting Office or independent accountants in accordance with the principles and procedures applicable to commercial corporate transactions. There is no specific statutory provision for an independent commercial audit of NTIS or requirement for the submission of an audit report to the Congress.

Departmental Administrative Procedures

As an agency of the Department of Commerce, NTIS is subject to the same management controls as all other parts of the Department. As is the case with all such departmental control systems, their purpose is to establish and enforce compliance with a uniform set of operational and policy guidelines applicable to all agencies within the department. But for an organization attempting to deal with and adjust to a continually changing market environment, adherence to such guidelines may result in lower efficiency, higher costs and/or missed opportunities. For this reason, the National Academy of Public Administration, in its 1983 report to Office of Management and Budget on government corporations stated that agencies similar to NTIS "should not automatically be subject to all the administrative rules and regulations of their department or of the Office of Management and Budget, but only to those which are meaningful for a revenue-generating business-type activity."

Position Ceilings

NTIS is subject to the same position (FTE) ceiling controls as are applied to agencies funded by appropriations. The ceiling is based on factors such as prior year usage, anticipated A-76 position savings, across-the-board cuts, or some combination of the above. But none of these factors is related to NTIS' business environment. Should NTIS require additional staff because of increased customer demand, new product opportunities, changed market/product mix, in-house retention of A-76 activities or any other business-related development, it might be unable to do so in a timely manner.

NTIS could obtain some relief from ceiling restrictions by "borrowing" FTE's from the Departmental pool. This solution, however, is temporary at best, and requires elaborate justifications before it can be accomplished.

Investment Opportunities

NTIS maintains, on the average, $9 million in its trust fund. The U.S. Treasury has interest-free use of this money, a benefit equal about $700,000 per year in avoided interest charges. As is the case with comparable trust and revolving funds, surplus in the NTIS fund should be invested in interest-bearing U.S. government obligations. At present NTIS and its users are, in effect, compelled to subsidize the government.

GSA Building Management

NTIS is located in three separate buildings in Springfield, Virginia which are leased by the General Services Administration for the Department of Commerce. In addition to paying GSA for the office space, NTIS also pays a surcharge (SLUC) of $250,000 which is retained by GSA. Since NTIS' rental charges are not subsidized by the taxpayers, but rather paid by users, this additional surcharge puts an extra burden on customers, who wind up paying higher prices to cover NTIS overhead. Some of the facilities are old, poorly maintained and subject to constant heating and air conditioning problems, all of which contribute to employee morale problems and to accelerated deterioration of equipment. For the total amount paid to GSA, NTIS could acquire improved quarters with better employee facilities, and could be located in one building.

PREVIOUS ACTIONS AT NTIS

In view of these problems and the fact that all federal agencies are encountering greater difficulty in obtaining resources, several actions that relate to the issues of funding and organizational design have been taken.

Public Enterprise Revolving Fund

In 1976 and again in 1979, GAO found itself unable to approve NTIS' proposed accounting system because the system provided for an equipment account to record equipment financed from trust fund receipts. GAO felt that this would be an improper use of the trust fund as NTIS lacked the explicit authority to purchase equipment. With OMB support, NTIS, in 1983, sought legislation to establish a public enterprise revolving fund with authority to receive appropriations of up to $5 million for initial working capital. The proposed legislation would permit NTIS to recover all costs (direct and indirect), retain net earnings and purchase equipment and inventory from the fund.

Both the House Committee on Science and Technology and the Senate Committee on Commerce, Science and Transportation reported favorably on the bill and recommended its passage. However, the House Committee on Energy and Commerce failed to act pending a request from Congressman Dingell for a GAO report. From June to August 1983, GAO made an on-site audit at NTIS during which time they gathered information for the report to Congressman Dingell.

GAO cited the following criteria for establishing a public enterprise revolving fund:

(1) the organization should operate under a continuing cycle of operations with most revenue coming from non-Federal sources;

(2) the organization should be substantially self-sustaining over a period of several years; and

(3) the organization should demonstrate a continuing need for financial flexibility to meet unforeseen requirements.

After examining NTIS operations, GAO concluded that the NTIS Clearinghouse met its criteria. However, GAO also concluded that the proposed legislation did not adequately provide for congressional oversight over Clearinghouse operations and recommended that additional controls should be placed on its operations. Theses include:

- periodic reauthorization which would require congressional oversight over Clearinghouse operations;
- annual submission of business-type financial statements and budgets to the Congress, including a statement of present and future financial requirements such as those required by the Government Corporation Control Act;
- limiting activities to those which have been reported to Congress in advance; and
- return of net income to the Treasury after prior-year adjustments, in excess of the amount needed to meet approved activities.

NTIS agreed with GAO's recommendations. Nevertheless, concerns about the adequacy of accountability provided by the bill continued to exist.

Privatization

As part of the Administration's drive to reduce the size and cost of Government, the Office of Management and Budget directed the Department of Commerce to develop a privatization proposal for NTIS to be included in the 1988 budget. In response, the Secretary of Commerce established an intra-Departmental Task Force to study the issue and present its findings and recommendations.

The Task Force employed an open, participative process to secure the views of users of government scientific and technical information, agencies that supply this information to NTIS, information industry firms that currently benefit from remarketing NTIS products, and firms that potentially would benefit from further privatization. A Federal Register notice was published to elicit comments from interested parties, followed by a public meeting to allow the Task Force to get specific information on key issues. In addition, the Department's Decision Analysis Center was used to develop a structured method of evaluating the major options against a common set of criteria.

The Task Force concluded that NTIS, as a self-sustaining Government agency that derives its revenue from user fees, was already a substantially privatized organization. Moreover, the Task Force found that adopting any sweeping privatization alternative would cost the government over $8 million and significantly weaken the Administration's ability to achieve other policy goals.

In order to achieve the goals of privatization, the Task Force recommended that NTIS aggressively pursue opportunities to enter into partnerships and joint ventures with the private sector whereby private sector firms would use NTIS materials to develop products and services that would benefit the user community. Restructuring NTIS as a government corporation would provide the agency with the flexibility to make this recommendation a reality.

Many respondents to the Federal Register notice concerning proposed privatization of NTIS objected to privatization on the grounds that it would limit access to non-classified research. The following excerpts which originated from a request for public comment are representative views of those who advocate that NTIS should remain a public agency:

Implementing the proposed privatization alternatives would require a radical reevaluation of the fundamental role of NTIS. Charles Sawyer presented the issue clearly in a statement of purpose issued in 1950, while he was Secretary of Commerce:

> In view of the increasing importance of technological development as a factor in individual business success and in national industrial supremacy, this bill gives specific content to one phase of this broad objective by providing explicit statutory authority for the creation of a peacetime clearinghouse which will make available to industry, business, and the general public results of technological research and development.

Thirty-six years later our national and international economic future seems less certain. If competitive participation in the world market is to continue, all U.S. business establishments, as well as the general public, must have equal and impartial access to all non-classified government sponsored research. NTIS has fulfilled its obligation to the public by making available to Americans what no private industry can: a national clearinghouse and archive for federally sponsored research. This public function has no place within the competitive private sector.

The arguments proposed in the Federal Register ignore the question of whether privatization is a responsible policy for managing government information. Every alternative presented would unfairly limit equal access to all collected non-classified research. For example, access to these research reports would be limited to those wealthy enough to afford the current "market value" of these reports. And who can guarantee that those reports without immediate value would be made available at any price? In private publishing industry, titles which may have scientific value but which are likely to have a limited readership are frequently dropped in favor of titles with a more popular appeal. So far the information collection and dissemination policies of NTIS have not been influenced by commercial self-interest.

Reasonable prices have been maintained even while allowing for a modest profit. Who can guarantee that this would continue to be the case if the private sector were to acquire any or all of these functions?

Government sponsored research and the reports of this research are two of our few remaining national resources in this "information age." The privatization alternatives proposed for NTIS would benefit one U.S. industry, that represented by the Information Industry Association. The information published by NTIS was paid for by public revenues and should be maintained as a public trust, available to anyone for a reasonable fee. As a frequent user of NTIS products, I cannot accept privatization as beneficial to the general public or the majority of U.S. business. I can not endorse a policy that places the interests of a select group above those of the American public.

ALTERNATIVE APPROACHES

The panel considered three structural variations for NTIS: (1) establishment of a public enterprise fund as previously recommended by NTIS: (2) vesting of corporate powers in the Secretary of Commerce for the administration of the program without creating a corporation (The Aviation Insurance Fund in the Department of Transportation is a model); and (3) a government corporation. The following section of this paper provides an overview of each alternative and presents the costs and benefits resulting from each alternative in non-monetary terms. The panel's primary concern focused on determining the degree to which various structural arrangements would influence the successful performance of NTIS.

(1) Public Enterprise Revolving Fund

Advantages

1. It would give NTIS explicit authority to operate a public enterprise revolving fund.

2. It would expressly permit NTIS to accumulate retained earnings, to use customer advances, and to acquire inventory and equipment. Would also allow NTIS to use a portion of the fund as a reserve in the event customer advances must be returned, and a portion as working capital.

3. It meets GAO and OMB criteria for a public enterprise revolving fund:

- The Clearinghouse has a continuing cycle of operations generating receipts primarily from non-Federal sources. Total Clearinghouse receipts generally exceed $20 million, with over 80% coming from sales of products and services to non-Federal sources.
- The Clearinghouse is generally self-sustaining. Although NTIS sustained a modest loss in fiscal years 1982 and 1985, in most years NTIS shows net income.
- NTIS needs the flexibility of a revolving fund to meet changing Clearinghouse expenses which vary according to customer demand.

4. It would have GAO support if the proposed legislation complied with the recommendations in their August, 1983 report, "Proposed National Technical Information Service Revolving Fund."

Disadvantages

1. Although a public enterprise revolving fund would make explicit NTIS' authority to operate the Clearinghouse under a revolving fund, the legislation would have little effect on NTIS operations since NTIS uses the trust fund as a revolving fund.

2. A public enterprise fund would not be subject to those provisions of the Government Corporation Control Act which assure accountability to the President and the Congress.

3. NTIS would continue to be subject to controls and regulations applicable to tax financed activities which hamper its operations without providing effective accountability.

(2) Vesting Equivalent of Corporate Powers in the Secretary without Creating a Corporation

Advantages

1. This alternative would vest in the Secretary of Commerce powers comparable to those normally given to a government corporation and would provide the financial flexibility necessary for the effective management of a business type program.

2. In administering the program, the Secretary could sue and be sued and would be subject to the Government Corporation Control Act and other laws specifically applicable to government corporations.

3. It would provide the flexibility to enter into partnerships with the private sector as recommended in the NTIS Privatization Task Force Report.

4. The NTIS would have increased status in the Department as the Secretary's program.

Disadvantages

1. At present, the Department does not interfere in the day-to-day operations of NTIS. Although the Secretary currently has the statutory authority to set rates and to take such steps as he may deem necessary and desirable to make scientific, technical and engineering information available, these functions have traditionally been performed by NTIS without Department involvement. This structure may provide the Secretary or his representative with the stimulus to micromanage NTIS.

2. It would not maintain NTIS as a separate legal entity.

(3) **Government Corporation**

Advantages

1. A Government Corporation would have essential financial flexibility including the use of a public enterprise revolving fund.

2. A corporate charter could provide exemptions from those laws and regulations which now increase costs and hamper operations.

3. NTIS could be given authority comparable to that of many other government corporations to invest funds not required for current operations in interest-bearing U.S. government securities.

4. A government corporation could be authorized to borrow either from the Treasury or the Federal Financing Bank to meet cash flow problems and to finance capital improvements included in its business type budget.

5. More effective oversight by the Congress, OMB, GAO and the Secretary of Commerce would be provided under provisions of the Government Corporation Control Act and its corporate charter.

6. Corporate status would serve to emphasize NTIS's distinctive character and the differences between it and other Department of Commerce programs which are not revenue producing and self-sustaining.

7. It would help to eliminate present misunderstandings within the Department of Commerce about NTIS' unique status. Corporate powers would be vested directly in the corporation administrator, but subject to direction and supervision by the Secretary of Commerce.

Disadvantages

1. While the government corporation is an accepted and legitimate organizational form, it is not well understood either by the Congress or NTIS' clientele. A proposal to create a corporation may be opposed merely because it is "different."

2. A major effort will be required to "educate" the Department of Commerce, OMB and user groups about the potential benefits and limitations of government corporations.

3. While a government corporation would provide the operating and financial flexibility which will make possible the most effective management of NTIS programs, it by itself, cannot guarantee this result. Continuing support and cooperation will be required from the Secretary of Commerce, the White House, OMB, and the Congress.

4. Enactment of legislation to create a government corporation will require the investment of significant time and effort by NTIS and the Department of Commerce.

CONCLUSIONS AND RECOMMENDATIONS

Enabling Legislation

At the time NTIS' enabling legislation was passed in 1950, the United States was just beginning to recognize the urgent problem caused by its inability to access the vast amount of scientific information being published throughout the world. Over the past three decades, the need for access to and availability of Federally-funded scientific and technical information, both for national and economic security, has increased significantly. Although NTIS has initiated many actions to meet this need, its efforts have been hampered by its lack of authority to move aggressively into new areas such as electronic dissemination of government scientific and technical information.

The panel was concerned that NTIS' vaguely drafted legislated mission would not permit the agency to take the lead in stimulating further research, economic development and technical advances through the dissemination of technical and scientific information. Information is a resource of strategic importance. Since science and engineering play major roles in the competitive battle for world markets, the need for legislation that enhances NTIS' role and allows the United States to exploit this potential is especially critical. The panel was unanimous in its recommendation that NTIS should seek legislation that would put it in a stronger position to further the national goal of achieving a competitive edge in international markets.

Corporate Charter

NTIS innovative managers have used many creative ways to deal with the restrictions of operating a self-sustaining business within the framework of regulations designed for agencies financed primarily by appropriated funds.

Nevertheless, the panel unanimously believes that NTIS should be restructured as a government corporation subject to the Government Corporation Control Act. The panel does not recommend special treatment for NTIS. On the contrary, it proposes that NTIS be brought under those established systems of financing, accountability and control which have been designed for comparable business type programs.

The panel found that NTIS fits the criteria for establishing a government corporation articulated by President Truman in 1948, criteria which remain valid today.

1. NTIS is revenue-producing.

Since its inception, NTIS has sold its products and services to the public for a fee. Over the last 5 years, NTIS has earned revenues of $20 to $23 million per year.

2. NTIS is self-supporting.

With the exception of some $500,000 appropriated for its patent licensing program, all NTIS activities are funded through sale of its products and services.

3. NTIS has a large number of business transactions with the public.

Over the past 18 months, NTIS has sold its products to some 40,000 individuals, firms, schools, libraries and governments, both foreign and domestic. Approximately 75 percent of NTIS customers are small businesses. In the past year, NTIS has shipped over 4.5 million documents and microforms, an average of 18,000 each day.

4. NTIS needs flexibility to operate efficiently as a business.

If it is to accomplish its mission and respond most effectively to market demand, NTIS requires the operational flexibility normally accorded corporate agencies. Although NTIS has developed solutions to some of the administrative problems it faces, these solutions sometimes depend on informal understandings with individuals rather than institutional rationale, and are thus extremely vulnerable to changes in personnel. A new Secretary of Commerce, a new departmental administrative officer, a new budget examiner, a new program associate director can disrupt this understanding, causing NTIS to waste time and energy in resolving the problem, resources that should be used to improve service to customers.

The panel believes that NTIS should seek a holistic solution to the myriad of problems it faces, rather than continue to employ the patchwork process it currently uses. By developing and securing the enactment of a corporate charter that places NTIS firmly within the purview of the Government Corporation control Act, NTIS will have the capabilities that go with corporate status, and will be able to operate in a more business-like manner.

The panel recognizes that incorporation would not solve all of NTIS' problems. The government corporation model, even after 35 years, is viewed as non-traditional. Within the departmental framework, adaptation is likely to require time and patience. However, incorporation will give NTIS an institutional character that is consonant with its enterprise-type roles and mission. For this reason its managers will stand on very strong ground in negotiating step transitions from generally applicable controls to the structures of accountability and efficiency envisioned by the Government Corporation Control Act.

ISSUES

Organizational Placement

NTIS carries out a major function of the Department of Commerce, namely, to make research and development results more readily available to industry and business. Because it contributes directly to the mission of the Department, NTIS, as a corporation, should continue to be located in the Department of Commerce. This arrangement also would give NTIS cabinet representation, and would facilitate coordination with related departmental programs.

Furthermore, NTIS should continue to be subject to policy direction and supervision by the Secretary, but its unique legal status should be recognized.

As a corporation, NTIS would have a different institutional character, making it more apparent that is should be freed from normal governmental and Departmental financial and administrative rules, allowing it the flexibility to respond to customer demands while carrying out a public purpose.

Advisory/Governing Board

Although many government corporations are governed by a board of directors to whom the chief executive office reports, this arrangement may not be appropriate for NTIS. If NTIS, as a government corporation were located within the Department of Commerce, reporting to the Secretary of Commerce who provided policy direction, a board of directors would be superfluous and might confuse the normal lines of authority between the Secretary and the Director of NTIS.

Moreover, the NTIS constituency which would normally be represented on the board of directors has diverse interests. This constituency, consisting of Federal agencies that contribute material to the collection, customers (university, state and local libraries, corporations, small businesses), information industry firms who purchase NTIS materials for re-marketing, and foreign governments, all have sharply differing views as to how NTIS should carry out its mission. The lack of a clear focus from a board might hamper NTIS' ability to accomplish its public purpose. An advisory board would be a more appropriate body to serve the Secretary of Commerce and advise the Corporation. Broad representation on such a board would provide the Secretary with a wide range of opinions to consider in developing information dissemination policy, but would not interfere with NTIS day-to-day operations.

Borrowing Authority

In this era of budgetary restraint, it is unlikely that any legislation passed on NTIS' behalf would provide an appropriation for sufficient working capital. Because NTIS has a continuing need to invest in capital equipment and to meet cash flow problems the ability to borrow from the Treasury or Federal Financing Bank would be especially desirable. NTIS should, of course, repay this money with interest.

Investment Authority

The ability to invest the funds currently maintained in the NTIS trust fund in interest bearing U.S. government securities would yield approximately $700,000 per year. This revenue could be used as working capital. Investment authority combined with borrowing authority would give NTIS more flexibility to respond rapidly to changing market conditions.

Government Corporation Control Act

The Government Corporation Control Act of 1945 was intended to establish consistent treatment and appropriate accountability and control of revenue producing business enterprises organized as government corporations and to assure that such enterprises could operate with "reasonable autonomy and flexibility" in carrying out authorized programs. The Act provides for an annual "business-type" budget and annual "commercial-type" audit by the Comptroller General, and requires the banking accounts of corporations to be kept with the Treasurer of the United States or with a bank approved by the Secretary of Treasury. The Government Corporation Control Act provides systems of budgeting, accounting and financial control which the Congress has determined to be best suited to enterprises such as NTIS.

Establishment of Rates

NTIS currently uses an iterative process to set rates for its products and services. Each product manager prepares a product plan which projects costs and revenues for the following year. Based on market activity, the product manager determines if a price change is warranted and makes proposals to the NTIS Pricing Committee. The NTIS Pricing Committee, comprised of line managers from each associate directorship, reviews the proposal and accepts, modifies or rejects it.

The NTIS Budget Office aggregates all product plans to make an initial estimation of the NTIS revenue base. The projected revenue is compared to NTIS' cost plan, which contains projected costs from all units. Through an iterative process, costs and revenues are reconciled and prices adjusted.

The Pricing Committee prepares a recommendation and justification for the Director who has final authority to approve prices. Price changes are published in the Federal Register. Users have no opportunity to make formal appeals.

The decision-making process surrounding rates is both intuitive and complex because it deals with demand projections, an inexact science at best. As such, it does not lend itself to a statutory formula. Guidelines setting limits on return on investment would be a more appropriate control mechanism for NTIS.

At present, the Secretary of Commerce has the statutory authority to approve prices; however, he has delegated this authority to the Director, NTIS, under a Departmental Organizational Order and has not personally exercised this authority. As a government corporation, NTIS pricing policy should be reviewed by an advisory board to ensure proper accountability.

Legal Authority

In keeping with the Administration's goal of using the private sector whenever possible, NTIS has taken steps to seek innovative means of establishing partnerships and joint ventures with information industry firms that would allow these firms to use NTIS materials to develop products and services that will (1) create market opportunities for the industry, and (2) provide more value for both NTIS and industry customers. The government corporation appears to be a good way of providing NTIS with the flexibility to facilitate this arrangement.

As a government corporation, NTIS would have the right to sue and be sued in its own name. This feature would enable a private business to contract with NTIS, secure in the knowledge that if something goes amiss, it can go to court rapidly to settle the matter. Similarly, NTIS, in dealing with private firms, would be empowered to seek direct relief in the courts should the private firm fail to perform, rather than obtain Department of Justice agreement to sue. Since the promise of speedy action is likely to be an attractive inducement for private firms when they consider joint ventures with the government, legal autonomy would be an important corporate feature for NTIS.

Administrative Autonomy

NTIS needs to operate within the framework of administrative regulations and controls designed for public enterprises in order to achieve its goals. Accountability can be provided through such means as an annual report, business-type budget, Congressional oversight, commercial audits and program and performance review by Departmental staff. With these mechanisms firmly in place, NTIS should pursue exemptions in the following areas:

- Personnel ceilings in order to adjust staff upwards or downwards to meet fluctuations in demand.
- Federal procurement regulations in order to purchase goods and equipment rapidly to meet customer requirements.
- GSA building management in order to lease space more suited to NTIS requirements, and at a more reasonable cost.
- Departmental administrative procedures that do not apply to a business-like entity.

A more detailed view might identify other administrative controls which are inappropriate for an operation such as NTIS; exemption from any such controls should also be pursued. Conversely, there are some controls for which an exemption is not warranted. For example, an agency/corporation with 350 employees should not seek wholesale exemption from Office of Personnel Management controls. Some relatively minor exemptions might be appropriate, but establishment of an entirely new personnel system for a staff of only 350 is unnecessary. Exemption from the controls listed above, however, appear to be the minimum required for the NTIS operation.

Implementation

Government organizations are subjected to increased demands and expectations and at the same time reduced financial resources. The need for NTIS to adapt to a market-oriented environment and meet challenges imposed by the exchange of technological and scientific information requires a change in organizational structure. The importance of matching NTIS' mission and goals to the appropriate organizational structure should be made as clear as possible. That is, it is incumbent upon NTIS managers to recognize the uniqueness of NTIS and its rapidly changing environment and to respond in a manner consistent with those characteristics.

The first step for NTIS is to develop a legislative proposal for discussion with the office of the Secretary of Commerce and the Office of Management and Budget. Before a draft is formally transmitted to the Congress, it should be discussed with appropriate members of the Congress and committee staff, the General Accounting Office and user groups.

Appendix A

Government Corporation Control Act *

---

* In 1982, the provisions of the Government Corporation Control Act of 1945, were codified in 31 U.S.C. 9101-9109.

Government Corporation Control Act [1]

PUBLIC LAW 248–79TH CONGRESS
CHAPTER 557–1ST SESSION

AN ACT

To provide for financial control of Government corporations.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Government Corporation Control Act."

DECLARATION OF POLICY

SEC. 2. It is hereby declared to be the policy of the Congress to bring Government corporations and their transactions and operations under annual scrutiny by the Congress and provide current financial control thereof.

TITLE I—Wholly Owned Government Corporations

SEC. 101. As used in this Act the term "wholly owned Government corporation" means the Commodity Credit Corporation; Federal Intermediate Credit Banks; Production Credit Corporations; Regional Agricultural Credit Corporations; Farmers Home Corporation; Federal Crop Insurance Corporation; Federal Farm Mortgage Corporation; Federal Surplus Commodities Corporation; Reconstruction Finance Corporation; Defense Plant Corporation; Defense Supplies Corporation; Metals Reserve Company; Rubber Reserve Company; War Damage Corporation; Federal National Mortgage Association; the RFC Mortgage Company; Disaster Loan Corporation; Inland Waterways Corporation; Warrior River Terminal Company; The Virgin Islands Company; Federal Prison Industries, Incorporated; United States Spruce Production Corporation; Institute of Inter-American Affairs; Institute of Inter-American Transportation; Inter-American Educational Foundation, Incorporated; Inter-American Navigation Corporation; Prencinradio, Incorporated; Cargoes, Incorporated; Export-Import Bank of Washington; Petroleum Reserves Corporation; Rubber Development Corporation; U. S. Commercial Company; Smaller War Plants Corporation; Federal Public Housing Authority (or United States Housing Authority) and including public housing projects financed from appropriated funds and operations thereof; Defense Homes Corporation; Federal Savings and Loan Insurance Corporation; Home Owners' Loan Corporation; United States Housing Corporation; Panama Railroad Company; Tennessee Valley Authority; Federal Housing Administration; and Tennessee Valley Associated Cooperatives, Incorporated.

---

[1] 59 Stat. 597.

SEC. 102. Each wholly owned Government corporation shall cause to be prepared annually a business-type budget which shall be submitted to the Bureau of the Budget, under such rules and regulations as the President may establish as to the date of submission, the form and content, the classification of data,[1] and the manner in which such budget program shall be prepared and presented. The budget program shall be a business-type budget, or plan of operations, with due allowance given to the need for flexibility, including provision for emergencies and contingencies, in order that the corporation may properly carry out its activities as authorized by law. The budget program shall contain estimates of the financial condition and operations of the corporation for the current and ensuing fiscal years and the actual condition and results of operation for the last completed fiscal year.

---

[1] As amended by sec. 105 of the Budgeting and Accounting Procedures Act of 1950.

Such budget program shall include a statement of financial condition, a statement of income and expense, an analysis of surplus or deficit, a statement of sources and application of funds, and such other supplementary statements and information as are necessary or desirable to make known the financial condition and operations of the corporation. Such statement shall include estimates of operations by major types of activities, together with estimates of administrative expenses, estimates of borrowings, and estimates of the amount of Government capital funds which shall be returned to the Treasury during the fiscal year or the appropriations required to provide for the restoration of capital impairments.

SEC. 103. The budget programs of the corporations as modified, amended, or revised by the President shall be transmitted to the Congress as a part of the annual Budget required by the Budget and Accounting Act, 1921. Amendments to the annual budget programs may be submitted from time to time.

Budget programs shall be submitted for all wholly owned Government corporations covering operations for the fiscal year commencing July 1, 1946, and each fiscal year thereafter.

SEC. 104. The budget programs transmitted by the President to the Congress shall be considered and legislation shall be enacted making necessary appropriations, as may be authorized by law, making available for expenditure for operating and administrative expenses such corporate funds or other financial resources or limiting the use thereof as the Congress may determine and providing for repayment of capital funds and the payment of dividends. The provisions of this section shall not be construed as preventing Government corporations from carrying out and financing their activities as authorized by existing law, nor as affecting the provisions of section 26 of the Tennessee Valley Authority Act, as amended. The provisions of this section shall not be construed as affecting the existing authority of any Government corporation to make contracts or other commitments without reference to fiscal year limitations.[1]

---

[1] As amended by P.L. 288, 80th Cong.

SEC. 105. The financial transactions of wholly owned Government corporations shall be audited by the General Accounting Office in accordance with the principles and procedures applicable to commercial corporate transactions and under such rules and regulations as may be prescribed by the Comptroller General of the United States: *Provided,* That such rules and regulations may provide for the retention at the offices of such corporations, in whole or in part, of any accounts of accountable officers, covering corporate financial transactions, which are required by existing law to be settled and adjusted in the General Accounting Office, and for the settlement and adjustment of such accounts in whole or in part upon the basis of examinations in the course of the audit herein provided, but nothing in this proviso shall be construed as affecting the powers reserved to the Tennessee Valley Authority in section 831h (b) of Title 16. The audit shall be conducted at the place or places where the accounts of the respective corporations are normally kept. The representatives of the General Accounting Office shall have access to all books, accounts, financial records, reports, files, and all other papers, things, or property belonging to or in use by the respective corporations and necessary to facilitate the audit, and they shall be afforded full facilities for verifying transactions with the balances or securities held by depositaries, fiscal agents, and custodians. The audit shall begin with the first fiscal year commencing after the enactment of this Act.

SEC. 106. A report of each such audit for each fiscal year ending on June 30 shall be made by the Comptroller General to the Congress not later than January 15 following the close of the fiscal year for which such audit is made. The report shall set forth the scope of the audit and shall include a statement (showing intercorporate relations) of assets and liabilities, capital and surplus or deficit; a statement of surplus or deficit analysis; a statement of income and expense; a statement of sources and application of funds; and such comments and information as may be deemed necessary to keep Congress informed of the operations and financial condition of the several corporations, together with such recommendations with respect thereto as the Comptroller General may deem advisable, including a report of any impairment of capital noted in the audit and recommendations for the return of such Government capital or the payment of such dividends as, in his judgment, should be accomplished. The report shall also show specifically any program, expenditure, or other financial transaction or undertaking observed in the course of the audit which, in the opinion of the Comptroller General, has been carried on or made without authority of law. A copy of each report shall be furnished to the President, to the Secretary of the Treasury, and to the corporation concerned at the time submitted to the Congress.

SEC. 107. Whenever it is deemed by the Director of the Bureau of the Budget, with the approval of the President, to be practicable and in the public interest that any wholly owned Government corporation be treated with respect to its appropriations, expenditures, receipts, accounting, and other fiscal matters as if it were a Government agency other than a corporation, the Director shall include in connection with the budget program of such corporation in the Budget a recommendation to that effect. If the Congress approves such recommendation in connection with the budget program for any fiscal year, such corporation, with respect to subsequent fiscal years, shall be regarded as an establishment other than a corporation for the purposes of the Budget and Accounting Act, 1921, and other provisions of law relating to appropriations, expenditures, receipts, accounts, and other fiscal matters, and shall not be subject to the provisions of this Act other than this section. The corporate entity shall not be affected by this section.

TITLE II—Mixed-Ownership Government Corporations

SEC. 201. As used in this Act the term "mixed-ownership Government corporations" means (1) the Central Bank for Cooperatives and the Regional Banks for Cooperatives, (2) Federal Land Banks, (3) Federal Home Loan Banks, and (4) Federal Deposit Insurance Corporation.

SEC. 202. The financial transactions of mixed-ownership Government corporations for any period during which Government capital has been invested therein shall be audited by the General Accounting Office in accordance with the principles and procedures applicable to commercial corporate transactions and under such rules and regulations as may be prescribed by the Comptroller General of the United States. The audit shall be conducted at the place or places where the accounts of the respective corporations are normally kept. The representatives of the General Accounting Office shall have access to all books, accounts, financial records, reports, files, and all other papers, things, or property belonging to or in use by the respective corporations and necessary to facilitate the audit and they shall be afforded full facilities for verifying transactions with the balances or securities held by depositaries, fiscal agents, and custodians. The audit shall begin with the first fiscal year commencing after the enactment of this Act.

Sec. 203. A report of each such audit for each fiscal year ending on June 30 shall be made by the Comptroller General to the Congress not later than January 15, following the close of the fiscal year for which such audit is made. The report shall set forth the scope of the audit and shall include a statement (showing intercorporate relations) of assets and liabilities, capital and surplus or deficit; a statement of surplus or deficit analysis; a statement of income and expense; a statement of sources and application of funds; and such comments and information as may be deemed necessary to keep Congress informed of the operations and financial condition of, and the use of Government capital by, each such corporation, together with such recommendations with respect thereto as the Comptroller General may deem advisable, including a report of any impairment of capital or lack of sufficient capital noted in the audit and recommendations for the return of such Government capital or the payment of such dividends as, in his judgment, should be accomplished. The report shall also show specifically any program, expenditure, or other financial transaction or undertaking observed in the course of the audit, which, in the opinion of the Comptroller General, has been carried on or made without authority of law. A copy of each report shall be furnished to the President, to the Secretary of the Treasury, and to the corporation concerned at the time submitted to the Congress.

Sec. 204. The President shall include in the annual Budget any recommendations he may wish to make as to the return of Government capital to the Treasury by any mixed-ownership corporation.

TITLE III—General Provisions

Sec. 301. (a) The expenses of auditing the financial transactions of wholly owned and mixed-ownership Government corporations as provided in sections 105 and 202 of this Act shall be borne out of appropriations to the General Accounting Office, and appropriations in such sums as may be necessary are hereby authorized: *Provided*, That each such corporation shall reimburse the General Accounting Office for the full cost of any such audit as billed therefor by the Comptroller General, and the General Accounting Office shall deposit the sums so reimbursed into the Treasury as miscellaneous receipts: *Provided further*, That in making the audits provided in said sections the Comptroller General shall, to the fullest extent deemed by him to be practicable, utilize reports of examinations of Government corporations made by a supervising administrative agency pursuant to law.

(b) For the purpose of conducting such audit the Comptroller General is authorized in his discretion to employ not more than ten persons without regard to the Classification Act of 1923, as amended, only one of whom may be compensated at a rate of as much as but not more than $10,000 per annum, and to employ by contract, without regard to section 3709 of the Revised Statutes, professional services of firms and organizations for temporary periods or for special purposes.

(c) The audit provided in sections 105 and 202 of this Act shall be in lieu of any audit of the financial transactions of any Government corporation required to be made by the General Accounting Office for the purpose of a report to the Congress or to the President under any existing law.

(d) Unless otherwise expressly provided by law, no funds of any Government corporation shall be used to pay the cost of any private audit of the financial records of the offices of such corporation, except the cost of such audits contracted for and undertaken prior to April 25, 1945.

Sec. 302. The banking or checking accounts of all wholly owned and mixed-ownership Government corporations shall be kept with the Treasurer of the United States, or, with the approval of the Secretary of the Treasury, with a Federal Reserve bank, or with a bank designated as a depositary or fiscal agent of the United States: *Provided*, That the Secretary of the Treasury may waive the requirements of this section under such conditions as he may determine: *And provided further*, That this section will not apply to the establishment and maintenance in any bank for a temporary period of banking and checking accounts not in excess of $50,000 in any one bank. The provisions of this section shall not be applicable to Federal Intermediate Credit Banks, Production Credit Corporations, the Central Bank for Cooperatives, the Regional Banks for Cooperatives, or the Federal Land Banks, except that each such corporation shall be required to report annually to the Secretary of the Treasury the names of the depositaries in which such corporation keeps a banking or checking account, and the Secretary of the Treasury may make a report in writing to the corporation, to the President, and to the Congress which he deems advisable upon receipt of any such annual report.

Sec. 303. (a) All bonds, notes, debentures, and other similar obligations which are hereafter issued by any wholly owned or mixed-ownership Government corporation and offered to the public shall be in such forms and denominations, shall have such maturities, shall bear such rates of interest, shall be subject to such terms and conditions, shall be issued in such manner and at such times and sold at such prices as have been or as may be approved by the Secretary of the Treasury.

(b) Hereafter, no wholly owned or mixed-ownership Government corporation shall sell or purchase any direct obligation of the United States or obligation guaranteed as to principal or interest, or both, for its own account and in its own right and interest, at any one time aggregating in excess of $100,000, without the approval of the Secretary of the Treasury: *Provided*, That the Secretary of the Treasury may waive the requirement of his approval with respect to any transaction or classes of transactions subject to the provisions of this subsection for such period of time and under such conditions as he may determine.

(c) The Secretary of the Treasury is hereby authorized to exercise any of the functions vested in him by this section through any officer, or employee of any Federal agency whom he may designate, with the concurrence of the head of the agency concerned, for such purpose.

(d) Any mixed-ownership Government corporation from which Government capital has been entirely withdrawn shall not be subject to the provisions of section 302 or of this section during the period such corporation remains without Government capital. The provisions of subsections (a) and (b) of this section shall not be applicable to Federal Intermediate Credit Banks, Production Credit Corporations, the Central Bank for Cooperatives, the Regional Banks for Cooperatives, or the Federal Land Banks, except that each such corporation shall be required to consult with the Secretary of the Treasury prior to taking any action of the kind covered by the provisions of subsections (a) and (b) of this section, and in the event an agreement is not reached, the Secretary of the Treasury may make a report in writing to the corporation, to the President, and to the Congress stating the grounds for his disagreement.

Sec. 304. (a) No corporation shall be created, organized, or acquired hereafter by any officer or agency of the Federal Government or by any Government corporation for the purpose of acting as an agency or instrumentality of the United States, except by Act of Congress or pursuant to an Act of Congress specifically authorizing such action.

(b) No wholly owned Government corporation created by or under the laws of any State, Territory, or possession of the United States or any political subdivision thereof, or under the laws of the District of Columbia, shall continue after June 30, 1948, as an agency or instrumentality of the United States, and no funds of, or obtained from, the United States or any agency thereof, including corporations, shall be invested in or employed by any such corporation after that date, except for purposes of liquidation. The proper corporate authority of every such corporation shall take the necessary steps to institute dissolution or liquidation proceedings on or before that date: *Provided*, That prior thereto any such corporation may be reincorporated by Act of Congress for such purposes and term of existence and with such powers, privileges, and duties as authorized by such Act, including the power to take over the assets and assume the liabilities of its respective predecessor corporation.

Approved December 6, 1945.

EXPLANATORY ILLUSTRATION OF BUDGETS FOR BUSINESS ENTERPRISE AND REVOLVING FUNDS

Statement A

Sources and Application of Funds

[For fiscal years ending June 30, 1951, 1952, and 1953]

This is a balanced presentation of the amounts becoming available during the year, either in the form of cash or other working capital, and the way in which these amounts have been used.

The statement excludes depreciation, losses on loans, and other transactions which affect neither cash nor other current assets and liabilities. It does reflect transactions which affect cash, accounts receivable, accounts payable, other accrued liabilities, inventories of supplies for administrative purposes, deferred charges and credits.

Both the "funds applied" and the "funds provided" parts of the statement are divided between "operations" and Treasury "financing." The sum of the amounts applied to operations less the amounts provided by operations equals the net expenditures, which are included within the budget expenditures for the Government as a whole.

	1951 actual	1952 estimate	1953 estimate
FUNDS APPLIED			
To operations:			
Acquisition of assets: Equipment	$ 18,234	$ 18,000	$ 18,000
Expenses:			
Purchase of materials[1]	646,610	630,000	630,000
Other expenses	877,396	966,500	966,500
Total expense	$1,524,006	$1,596,500	$1,596,500
Subtotal[2]	1,542,240	1,614,500	1,614,500
Increase in selected working capital items[3]	192,866	14,367	6,266
Total funds applied to operations	1,735,106	1,628,867	1,620,766
To financing: Increase in Treasury cash	135,631	633	....
Total funds applied	$1,870,737	$1,629,500	$1,620,766
FUNDS PROVIDED			
By operations:			
Realization of assets: Equipment	$ 2,096	$ 3,500	$ 2,500
Income:			
Sales of goods and services	1,566,956	1,624,500	1,615,500
Rental income from quarters	1,685	1,500	1,500
Total income	$1,568,641	$1,626,000	$1,617,000
Total funds provided by operations	1,570,737	1,629,500	1,619,500
By financing:			
Appropriation	300,000	....	....
Decrease in Treasury cash	....	....	1,266
Total funds provided	$1,870,737	$1,629,500	$1,620,766

EFFECT ON BUDGETARY EXPENDITURES

Funds applied to operations	$1,735,106	$1,628,867	$1,620,766
Funds provided by operations	1,570,737	1,629,500	1,619,500
Net effect on budgetary expenditures[4]	$ 164,369	$ -633	$ 1,266
The above amounts are charged (or credited [-]) as follows:			
To budgetary authorizations[4]	300,000	....	....
To net receipts of the enterprise[4]	-135,631	-633	1,266

---

[1] Purchases for manufacture or sale are shown here, whether or not the materials are used within the year.

[2] The amounts applied to operations, other than changes in working capital, are usually broken down by object class in a supporting schedule. Where there are annual congressional limitations on administrative expenses, the object schedule is usually limited to the expenses which are under limitation.

[3] The change in selected working capital items will equal the difference between the figures on statement C for two successive years for current assets, other than Treasury cash and inventories for sale and manufacture, less current liabilities.

[4] Net effect on budgetary expenditures includes the spending of appropriations for the revolving fund as well as the spending of the fund's own receipts. A negative figure here indicates collections in excess of expenditures.

Statement B
Income and Expenses
[For fiscal years ending June 30, 1951, 1952, and 1953]

This is a statement of the income and expenses and the resulting profit or loss for the year. This statement is normally on a full accrual basis, including in the expenses sums for depreciation and provision for losses on receivables. It also indicates losses and charge-offs when they occur. In addition, gains or losses from the sale of equipment or other assets appear here.

At the bottom of this statement there is an analysis of the retained earnings or cumulative deficit, showing any additions to it during the year, any charges made against it, and the balance at the end of the year.

	1951 actual	1952 estimate	1953 estimate
Income:			
Sales of goods and services	$1,566,956	$1,624,500	$1,615,500
Rental income from quarters	1,285	1,500	1,500
Total income[1]	$1,568,241	$1,626,000	$1,617,000
Expenses:			
Cost of materials sold:			
Purchase of materials	646,616	630,000	630,000
Materials donated	3,033	2,001	3,000
Change in materials inventory	4,263	18	------------
Cost of materials sold[2]	653,912	632,019	633,000
Other Expenses	877,386	966,500	966,500
Depreciation on equipment[3]	26,492	25,000	25,000
Total expenses	$1,557,790	$1,623,519	$1,624,500
Net income (or loss [-]) from operations	$ 10,451	$ 2,481	$ -7,500
Nonoperating income:			
Proceeds from sale of fixed assets	2,496	3,500	2,500
Net book value of assets sold	872	2,000	2,000
Gain on sale of fixed assets	$ 1,624	$ 1,500	$ 500
Net income (or loss [-]) for the year	12,075	3,981	-7,000
Retained earnings beginning of year[4]	------------	12,075	16,056
Retained earnings end of year[4]	12,075	16,056	9,056

---

[1] Income (as well as expenses) is usually based on the accrual method of accounting.

[2] Cost of goods sold, rather than purchases, is considered an expense in this statement.

[3] Depreciation and other expenses not shown on statement A are indicated separately.

[4] Retained earnings here agree with the balance sheet. It represents cumulative profits kept in the business, whether in the form of cash, inventories, receivables, or fixed assets.

Statement C
Financial Condition
[As of June 30, 1951, 1952, and 1953]

This is a balance sheet of assets, liabilities, and investment of the Government at the close of the fiscal year. Like the other statements, it is normally on an accrual basis.

The section for the Government's financial interest is broken down to indicate the amount which has been invested by the Government on which the fund pays interest (if any), the amount invested on which the fund does not pay interest, and the retained earnings or deficit.

	1951 actual	1952 estimate	1953 estimate
ASSETS			
Current assets:			
Cash with U. S. Treasury[1]	$ 119,631	$ 136,266	$ 115,000
Accounts receivable	365,046	340,000	360,000
Inventory of supplies and materials	95,019	95,001	95,001
Total current assets	$ 579,696	$ 571,267	$ 570,001
Fixed assets:			
Equipment	291,451	295,451	299,451
Less portion charged off as depreciation	107,648	114,648	127,648
Total fixed assets	$ 183,803	$ 180,803	$ 171,803
Total assets	$ 763,499	$ 752,070	$ 741,804
LIABILITIES			
Current liabilities:			
Accounts payable	124,073	110,000	106,730
Accrued expenses	126,338	121,000	120,000
Total liabilities[2]	$ 250,411	$ 231,000	$ 226,730
INVESTMENT OF U. S. GOVERNMENT			
Principal of fund:			
Appropriation	300,000	300,000	300,000
Donated assets, net	201,013	205,014	208,014
Total principal of fund	501,013	505,014	508,014
Retained earnings	12,075	16,056	9,056
Total investment of U. S. Government[3]	$ 513,088	$ 521,070	$ 517,070
Total liabilities and investment of U. S. Government	$ 763,499	$ 752,070	$ 743,800

---

[1] Cash with United States Treasury is the sum that the fund has on deposit with the Treasury. It excludes any balances of appropriations (or other authorizations) which have not yet been paid into the business enterprise or revolving fund.

[2] Liabilities normally means what is owed for goods and services which have been received. The remainder excludes obligations outstanding for items on order of $43,610 as of June 30, 1951, $33,000 as of June 30, 1952, and $31,000 as of June 30, 1953.

[3] The investment of the United States Government indicates the Government's interest as owner, plus the Government's interest as creditor in the form of notes payable to the Treasury where a Government corporation has authorization to borrow on such notes.

Mr. **Walgren** [presiding]. Thank you for your testimony. How did NTIS get going in this fashion, if I could ask? It seems it did not fit either in the tax-funded side, and it did not fit into the independently funded side. What is the history there?

Dr. **Seidman**. It was set up by a very inadequate statute, Mr. Chairman. It has a very brief statement of purpose, and then it provides for funding either by a working capital fund in the Department of Commerce, or from a separate account.

The language here is completely inadequate. For a long time the original funds were I think actually administered by the National Bureau of Standards.

Basically, what you have in the present law is the equivalent of a working capital fund. The Treasury calls it a trust fund, on what basis, I don't know. Trust funds are usually set up by law. There is nothing in the law that describes this as a trust fund. It is really a public enterprise fund, but it is treated as a working capital fund.

Working capital funds are those which are normally used in a Department to really handle internal services, such as printing or reproduction services and to distribute the costs to the various elements of the department who use it.

This certainly is not what this fund is for.

The Congress recognized when it enacted the Government Corporation Control Act that you need two different systems of accounts, and budgeting and auditing; one for self-supporting business or public enterprises, and the other for normal tax-supported activities.

I think you need a new statute for the NTIS, a new statement of purpose, redefined. Creation of a corporation would afford the Committee an opportunity not only to provide a form of organization and financing best suited to NTIS, but also to provide a restatement of the mission and the intent of Congress in creating the service, which has never been done except in a very brief statement.

Mr. **Walgren**. Well, we certainly appreciate that view, and the confusion that has developed over NTIS in the past—there were some suggestions to sort of piecemeal, to enable them to use their funds more flexibly, as I understand it. It may be that now might be a very good juncture to try to come to grips with the actual structure of the organization.

Dr. **Seidman**. If I were a user, I would object to certain costs now being borne by NTIS, which it should not bear as a public enterprise—to give an example, the surcharges, GSA charges for building rental. When you are a tax-supported agency, and the Congress includes the amount of the surcharge in your appropriation, you don't worry about the cost.

But when NTIS pays a surcharge to GSA, it has to recover the costs from its users.

In the same way the Department of Commerce distributes certain costs to NTIS across the board. If they are being paid out of appropriations—the argument is, out of one pocket rather than another, it doesn't make any difference. It makes a great deal of difference when those become cost elements which get into charges which you are paying to services.

I don't think we are in a position to completely document this, but I think NTIS today is being compelled to assume costs which are not costs that really ought to be charged to an enterprise of that type.

Mr. **Walgren**. You mentioned that because they can't invest their holdings, that they——

Dr. **Seidman**. Are subsidizing the government.

Mr. **Walgren**. Are subsidizing the Treasury, and that would be at what percent is the loss there? I gather that is a calculable loss.

Dr. **Seidman**. I think roughly about $700,000 a year. The total of Government interest-bearing securities now held by Federal enterprises is $69 billion. That is the normal practice with trust funds or public enterprise funds that—funds not required for current use are invested in interest-bearing obligations.

They are not provided to the Treasury interest-free.

Mr. **Walgren**. Can we get an indication of how much pure cost that is to the NTIS each year; what would be their return on that investment?

Dr. **Seidman**. I think that is included in the report. My recollection is that it was a few hundred thousand dollars; it was significant.

$700,000 per year is estimated as the return to NTIS in interest on the investment. Of course, that depends on what the interest rates on Treasury obligations are at the time; it wouldn't be fixed.

Mr. **Walgren**. So their total volume is about $22 million, or something like that.

Dr. **Seidman**. That is right.

Mr. **Walgren**. So you are talking about 1/20, or something approaching five percent effort lost because of the fish-nor-fowl structure of this operation.

Dr. **Seidman**. That is correct.

Mr. **Walgren**. The Chair recognizes Mr. Price.

Mr. **Price**. Dr. Seidman, you have heard the testimony we have heard this morning as to the various problems that complete privatization might bring.

I wonder if you, in general, agree with that characterization of privatization as problematic, and secondly, whether you think that the Government corporation structure would avoid those problems.

Dr. **Seidman**. I think one, clearly—and we did consider this—the Government corporation structure is one which recognizes that it is a public purpose to be achieved. This is often, I think, one of our problems in dealing with the community at large, often they misunderstand what a Government corporation is.

The Supreme Court said that although the Congress chose to call it a corporation doesn't distinguish it from any other agency which is fulfilling a public purpose. A Government corporation is created because it is carrying out a public purpose; it is not privatization, although sometimes people refer to it in that sense.

It is not. It provides the form of organization and the type of financing which enables the mission established by the Congress to be most effectively accomplished, and recognizes there is a distinction between those types of activities which are selling services, which they use to pay for, and those which are tax-supported.

The Government has an entirely different relationship. When you come to the Government and you say you are selling me a service—I am entitled to it. I am paying for it. Rather than the other process of saying, well, we will invest so much in appropriated funds in this activity, and when we don't have any more appropriation, we don't provide the service any more.

Mr. **Walgren**. So you would agree that NTIS is not a good candidate.

Dr. **Seidman**. Not privatization. The Chairman said, it seems to me, they start out with a solution and then try to find the rationale afterwards. Having administered the A-76 program, I would caution that there are a lot of costs— to contracting out. Any reorganization is a very high-cost exercise. When you contract out something of this type, one, you are losing continuity, you are losing institutional memory. These are intangible costs which are very important. You are basically in a non-competitive situation. You don't have a lot of companies—you are not buying something off the shelf—you don't have a lot of companies competing for this.

The contractor has the high hand because you can't say—well, we don't like the way you are performing, we will get another contractor; try and find one. This is not a competitive area where there are a lot of contractors ready to take it over.

The other element of cost, which in A-76 and other analyses is not usually included, is the cost of supervising a contract. I think we have been reading enough about problems with our contractors today and contract operations at Defense, to see what happens when you don't supervise.

Getting a Go-Co, government-owned and contractor-operated contract, doesn't relieve you of the cost of supervision. It means increased costs. You have to maintain an in-house capability and that I might say would require appropriated funds to pay for it now, which is not now provided in the budget.

So I would think that the net effect and budgetary impact of privatization on NTIS would be higher costs, not less cost, and greater cost to the Government.

The only thing they would avoid and one of the impetuses for contracting out is to reduce the numbers of people listed on the civilian Government payroll, to transfer the numbers of people employed from the Government sector to the private sector. We have reduced the numbers. That is the only practical benefit that I can see that OMB must have in mind in doing this.

I can't see anything else.

Mr. **Price**. I wonder if the other witnesses, in particular Mr. Edgell, might comment on the option of the Government corporation.

Mr. **Edgell**. Yes, sir. I would say that it is very interesting for me to hear a witness of Dr. Seidman's stature to articulate the position of the American Federation of Government Employees. We feel much the same way about contracting out—the loss of control, and also the smoke and mirrors of how many people work for the Government.

But putting that aside, in response to your question, I think the formation of a better structured legislatively Government corporation may be the answer for NTIS. That way, you could not only articulate the mission and what is expected, but also better control the revenues and expenditures and other services rendered.

Mr. PRICE. Dr. Detlefsen?

Dr. DETLEFSEN. The American Library Association and the Medical Library Association have not yet reviewed the idea of a Government corporation, so I am not really speaking for them as much as wanting to make two observations.

One is that any Government corporation must be able to enter into those international agreements that are necessary to bring us the 25 percent of the current NTIS data base. I suspect that that is possible because the St. Lawrence Seaway Corporation is able to enter into international agreements for the maintenance of that shipping channel.

We would also be concerned that any Government corporation be able to cooperate with the GPO and the Depository Library Program, as NTIS now does, in order to provide to depository libraries the bibliographic apparatus of NTIS. They receive the indices and newsletters and other bibliographic control mechanisms that NTIS produces as part of the depository program, and then, in turn make them available to the general public.

We would want to be absolutely clear that that function is maintained in a structure such as Government corporation.

Mr. PRICE. Thank you, Mr. Chairman.

Dr. SEIDMAN. May I comment briefly on that? A Government corporation wouldn't make any difference with respect to that. A Government corporation is a Government agency. Its relationships are the same. It is a different way of carrying out a Government activity. We have a number of them, and one that is not formally a corporation, the Post Office, which is the equivalent of a corporation, that have extensive international dealings.

It would be dealing often with government corporations in other countries. So in terms of relationships with the depository program, none of that would be changed unless the Congress saw fit in enacting legislation to change it.

Mr. EDGELL. Mr. Chairman, if I could comment. A Government corporation should not be confused with some earlier reference by witnesses on Panel 1, which were to talk about or consider the option of Federal cooperative—that is, Federal employees being authorized to form a company. That is not what I addressed.

I was talking in terms of the Government corporation that really would be controlled by the Congress and the process of that; not some popular Fed-Co-op or other such thing, which have a great deal of clarification yet to come forward. We don't know what people are talking about.

Mr. WALGREN. That certainly was a rather radical suggestion on the part of this Administration; employees being able to buy an agency.

Mr. EDGELL. I just want to make clear, I was not talking about that. I was talking about a Government corporation.

Mr. WALGREN. Mr. Wyatt.

Mr. WYATT. The research libraries and universities and the Association of Research Libraries are very interested in the disposition of the NTIS. The idea of a public corporation is one which we would be certainly willing and anxious to speak with the Committee about at some length.

We feel that it would be necessary to have legislation to establish such a corporation. We would be very interested in the form of that legislation, the charge that was issued to the corporation. We would also be very much interested in the form of governance of that corporation feeling that for a corporation like that to be fully effective, it would be necessary to have input from all sectors of the economy that deal with the NTIS, both from the point of view of the information consumer, as well as the information producers in the Government agencies and the private information sector which may provide value added products to whatever comes out of the NTIS.

Mr. **WALGREN**. The Chair recognizes Mr. Valentine.

Mr. **VALENTINE**. Thank you, Mr. Chairman. I, as you know, got in here late, and I might ask you a question that you have already answered, and if so, I apologize. Dr. Seidman, this agency, the NTIS, was not, as I understand it, not one of the Federal agencies which—what Commission was it that was so much ballyhoo——

Dr. **SEIDMAN**. The Grace Commission.

Mr. **VALENTINE**. The Grace Commission, as to government agencies that should be privatized; it was not on that list, was it?

Ds. **DETLEFSEN**. The opposite was true. The Grace Commission felt the NTIS should be strengthened, not given over to the private sector.

Mr. **VALENTINE**. Given those facts, and considering that several attempts as I understand it have been made to privatize this agency over the past several years, if you are able to say, who is after you?

And, if you can add to that, you might not be able to speak, but the agency is tucked in there, in the Department of Commerce, is it not? How does the Secretary feel about this?

Dr. **SEIDMAN**. I am an alumnus of the Bureau of the Budget before it became the Office of Management and Budget. I think people start out with a policy. We used to have an old saying, it doesn't have to be right, it is policy. That is what old career people used to say around the Budget Bureau. I think this is one of those—you don't have to be right.

I don't understand. It does not follow the A-76. There are no budgetary savings here, whatsoever. As I said, the only possible benefit would be to give the appearance symbolically of moving things into the private sector and to reduce the number of people on the civilian payroll.

Other than that, I cannot understand what the pressure is for doing this.

Mr. **VALENTINE**. Maybe it is the same guy that wants to sell the weather satellites to the private industry. Is there any corporation that you know of in the country that is capable of doing what you do? Do you have somebody out there that wants this job and wants your operation?

Dr. **SEIDMAN**. I am not from NTIS. I am from the National Academy of Public Administration. You can always find someone who will take over the service if you are willing to contract with them and pay the price.

Incidentally, on a Go-Co contract, they get a management fee. That is another euphemism for a cost-plus contract. So the more that is paid, the more they make. It is not necessarily efficient. There are circumstances where this is the thing to do.

This is not that kind of program. Running a large manufacturing facility is not something which the Government has great capability of doing. So there are some reasons why you would use a Go-Co contract. You wouldn't here.

I can cite problems that have occurred in this area. For example, when they wanted the Atomic Energy Program to change contractors at the Hanford Facility, DuPont wanted to get out of it. You had to negotiate with General Electric taking it over from DuPont because if DuPont left and took with it the executive personnel, nobody could take over that facility.

Usually, where you have a non-competitive situation, where in effect you are creating a monopoly in the hands of the contractor, from then on the contractor is in the position to dictate to the Government and not the reverse.

Mr. **Valentine**. Thank you, sir.

Mr. **Walgren**. Very revealing. That is an interesting subject, and one this Committee really should accept responsibility for, and we appreciate the thrust of all your testimony. I particularly appreciate the thought, Dr. Detlefsen, that the Administration is at cross-purposes when it comes to protecting sensitive information, and promoting its dissemination abroad, versus trying to encourage information to be at least first used domestically.

I appreciate your testimony on that point. It is powerful.

We would also like to pursue with you the idea of the moratorium on contracting out with respect to Federal libraries. It is a very good suggestion and one that we ought to think about with you

Dr. **Detlefsen**. Yes, there are a number of examples which could be brought forth, perhaps at another time. The experience to date of libraries that have been contracted out and the processes that libraries and information centers have had to go through in the A-76 reviews, and the RFP proposals have been very interesting.

I know from a colleague, at least with a NASA contractor, (that in that library), there are two side-by-side identical staffs; one cleared to work with the sensitive material and one not. They have ended up with a duplication of efforts by contracting out, so that they have two people with parallel job responsibilities, one of whom is working with secret data and one of whom is working with non-secret data doing the same job function.

So I think there is a great deal more to be explored and I would hope that we could work out a way of discussing this proposed moratorium that we feel is most important to prevent this activity from making further inroads into efficient information service.

Mr. **Walgren**. It all seems so self-defeating. I remember vaguely a quote from a forward of a book by Walt Kelly, who, as we all know, drew "Pogo." It was something to this effect—this image was of somebody driving through the rains, sort of pell-mell that as we drive along running down our neighbors, and running up our colors, we best beware we are not hoisted by our own halyards.

When you think of how we are cutting off our nose to spite our face, by being driven by ideology, politically motivated ideology, as well, it seems to have some threads of the same thought.

On behalf of the Committee, thank you very much for your contribution. We appreciate you all as a resource to us, and look forward to working with you.

Let me call the last panel, which will focus on the National Quality Improvement Award Act, H.R. 812. Mr. John Hudiburg, of the Florida Power and Light Company; Dr. Frank Gryna, Vice President of Juran Institute; and William Eggleston, Vice President for Quality, International Business Machines.

We appreciate your patience and apologize for the length of these proceedings.

Written statements will be made part of the record and we can be very informal, truthfully, as informal as you would like to be.

We appreciate your outlining to us and calling attention to the points that you feel are most important. Let me turn to our colleague from Florida, Mr. MacKay, for an introduction.

Mr. MacKay. Mr. Chairman, I appreciate your indulgence. It is my pleasure to introduce to you and others in the audience, John Hudiburg, who has been a member of Florida Power and Light's management for several decades. His company is known as one of the most efficient companies in the utilities business in America. We are very proud to have him in Florida, a State which is undergoing the stresses of astounding growth levels, which makes utility companies' management probably as difficult and tricky as any business anywhere in the country.

Mr. Hudiburg is one of the reasons that this company has achieved this outstanding record, and I am very pleased to have him here to talk with the Committee today about some of the new innovations that are going on.

Mr. Walgren. Thank you, Mr. MacKay. Let's start with Mr. Hudiburg. Welcome. We are glad you are here.

STATEMENTS OF JOHN J. HUDIBURG, CEO, FLORIDA POWER & LIGHT CO.; DR. FRANK M. GRYNA, VICE PRESIDENT, JURAN INSTITUTE, INC.; AND WILLIAM W. EGGLESTON, VICE PRESIDENT FOR QUALITY, INTERNATIONAL BUSINESS MACHINES, INC.

Mr. Hudiburg. Thank you, Mr. Chairman. It is a pleasure to be with you here today to speak about corporate quality in America, and to promote the idea of a National Award for the recognition of such quality. We greatly appreciate the Chairman and the other Members of the Committee's sponsorships of H.R. 812.

In recent years, the notion of American quality has been severely criticized. The very idea of quality products and services in the United States has become somewhat of a myth.

As part of corporate America, we at Florida Power and Light do not accept such myth, and we are not alone in our belief that quality is not only alive and well in the United States, but that it is on the verge of thriving as never before.

President Reagan, in his State of the Union Address earlier this year, touched upon the necessity for us to compete in the world's business community. He pointed out that in his lifetime America set the standard for the world. To continue to do so into the 21st Century, he concluded, we must act now. In the Congress and throughout America, the whole issue of competition in the world marketplace is very much the topic of the day.

Last year, in testimony before this Subcommittee, I offered the opinion that we were in the midst of a National revival of quality. At the center of this revival is a commitment to excellence in products and services which is not only essential for the well-being of our economy, but vital to our country if we intend to recapture the competitive standing in the world marketplace.

I mentioned that while we hold such commitment in high esteem, we have no National monument to such lofty goals. There is no America's Cup for corporate quality.

I am convinced that there is a need to somehow honor this Nation's top businesses and industries as they go about making "quality first" more than merely a slogan.

It is my feeling that a Governmental effort is the best way to showcase such an award and to provide its recipients with the worldwide prestige and distinction that they deserve. I believe that now is the perfect time to put such an idea into motion.

The corporate competition for Number One is fierce these days. The battles are global in nature and the participants are world class. Some, such as the Japanese, have often beaten us at our own game, taking the original American concept of quality control and fashioning it into their own highly successful game plan.

Like the Japanese, we need to encourage, recognize and reward exceptional efforts in excellence.

In Japan, the most prestigious achievement a company can earn is the Deming Prize for outstanding statistical quality control contributions. The Deming Prize has come to be accepted worldwide as the supreme standard for excellence, and in that there is a certain touch of irony.

As if to underscore the fact that they so successfully imported an American product, the Japanese have named their highest corporate award in honor of an American, Edward Deming, a resident of this city, and yet, the country which produced such quality pioneers as Dr. Deming and Dr. Juran can boast of no such award of its own.

I hope that through H.R. 812, that we are about to fill that void by establishing a National Quality Improvement Award.

I would like to emphasize what I see as the key points of such an award. First, it should be prestigious. By having the President, himself, present the award, we could be sending a message to the world that "made in the U.S.A." is more than just a label, it is a proud boast.

Second, I think the award should be self-funding. We have all too often been accused of short-changing the American consumer in the past years, and in my judgment, we certainly have no right to ask the American taxpayers to foot the bill when it comes to recognition of quality.

Third, and the core of the whole thing, the Award must be won the old fashion way, it must be earned.

The criteria must be rigorous, requiring intensive evaluation by a panel of highly qualified judges, as well as on-site audit and verification of accomplishments to be considered.

I believe we need an additional incentive at this time to inspire the participants in what may be this Nation's most meaningful competition. We need something to raise the level of everyone's game to a new plateau. We need to establish benchmarks of quality by which corporate America can be measured and we need to allow those companies which achieve such heights, shout it to the world.

Last October at the Fortune Magazine Forum in New York City, the Chairman and Chief Executive Officer of Westinghouse, put the subject of quality into perspective. About five seconds, into his speech, Douglas Danforth insisted that "Quality is America's most powerful weapon, and we have to have it to strengthen our competitive ability."

I think corporate America is in the process of doing its part. Now is the time for such efforts to be encouraged, recognized and rewarded.

A National Award for excellence and quality can go a long way in speeding up the process and help us to improve our competitive position in the world marketplace.

And thank you, very much, for the opportunity to appear here today for the Subcommittee.

[The prepared statement of Mr. Hudiburg follows:]

QUALITY AWARD TESTIMONY

SCIENCE, RESEARCH AND TECHNOLOGY SUBCOMMITTEE

OF THE HOUSE COMMITTEE

ON SCIENCE AND TECHNOLOGY

WASHINGTON, D.C.

MARCH 4, 1987

JOHN J. HUDIBURG
CHAIRMAN OF THE BOARD
AND CHIEF EXECUTIVE OFFICER
FLORIDA POWER & LIGHT COMPANY

MR. CHAIRMAN ... IT IS A PLEASURE TO BE HERE TODAY TO SPEAK ABOUT CORPORATE QUALITY IN AMERICA ... AND TO PROMOTE THE IDEA OF A NATIONAL AWARD FOR RECOGNITION OF SUCH QUALITY.

I AM SURE SOME CRITICS OF THE AMERICAN BUSINESS SCENE WOULD INSIST THAT ANY AWARD FOR CORPORATE QUALITY IN AMERICA IS SOMEWHAT PREMATURE. SUCH CYNICS WOULD ARGUE THAT WE MUST FIRST MEET QUALITY STANDARDS BEFORE ANY AWARDS ARE PRESENTED.

IT IS TRUE THAT IN RECENT YEARS THE NOTION OF AMERICAN QUALITY HAS BEEN SEVERELY CRITICIZED. THE VERY IDEA OF QUALITY PRODUCTS AND SERVICES IN THE U.S.A. HAS BECOME SOMEWHAT OF A MYTH.

AS A PART OF CORPORATE AMERICA, WE AT FLORIDA POWER & LIGHT COMPANY DO NOT ACCEPT SUCH A MYTH ... AND WE ARE NOT ALONE IN OUR BELIEF THAT QUALITY IS NOT ONLY ALIVE AND WELL IN THE UNITED STATES ... BUT THAT IT IS ON THE VERGE OF THRIVING AS NEVER BEFORE.

PRESIDENT REAGAN, IN HIS STATE OF THE UNION ADDRESS EARLIER THIS YEAR, TOUCHED UPON THE NECESSITY FOR US TO COMPETE IN THE WORLD BUSINESS COMMUNITY. HE POINTED OUT THAT IN HIS LIFETIME, AMERICA SET THE STANDARD FOR THE WORLD. TO CONTINUE TO DO SO INTO THE TWENTY-FIRST CENTURY, HE CONCLUDED, WE MUST ACT NOW. IN THE CONGRESS AND THROUGHOUT AMERICA, THE ISSUE OF COMPETITION IN THE WORLD MARKETPLACE IS VERY MUCH THE TOPIC OF THE DAY.

LAST YEAR, IN TESTIMONY BEFORE THIS SUBCOMMITTEE, I OFFERED THE OPINION THAT WE WERE IN THE MIDST OF A NATIONAL REVIVAL OF QUALITY.

AT THE CENTER OF THIS REVIVAL IS A COMMITMENT TO EXCELLENCE IN PRODUCTS AND SERVICES WHICH IS NOT ONLY ESSENTIAL FOR THE WELL-BEING OF OUR ECONOMY ... BUT VITAL TO OUR COUNTRY IF WE INTEND TO RECAPTURE OUR COMPETITIVE STANDING IN THE WORLD MARKETPLACE.

I MENTIONED THAT WHILE WE HOLD SUCH A COMMITMENT IN GREAT ESTEEM ... WE HAVE NO NATIONAL MONUMENT TO SUCH LOFTY GOALS. THERE IS NO AMERICAS CUP FOR CORPORATE QUALITY.

I AM CONVINCED THERE IS A NEED TO SOMEHOW HONOR THIS NATION'S TOP BUSINESSES AND INDUSTRIES AS THEY GO ABOUT MAKING "QUALITY FIRST" MORE THAN MERELY A SLOGAN. IT IS MY FEELING THAT A GOVERNMENTAL EFFORT IS THE BEST WAY TO SHOWCASE SUCH AN AWARD AND PROVIDE ITS RECIPIENTS THE WORLDWIDE PRESTIGE AND DISTINCTION WHICH THEY DESERVE.

I BELIEVE NOW IS A PERFECT TIME TO PUT SUCH AN IDEA INTO MOTION.

THE CORPORATE COMPETITION FOR NUMBER ONE IS FIERCE THESE DAYS. THE BATTLES ARE GLOBAL IN NATURE AND THE PARTICIPANTS ARE WORLD-CLASS. SOME -- SUCH AS THE JAPANESE -- HAVE OFTEN BEATEN US AT OUR OWN GAME, TAKING THE ORIGINAL AMERICAN CONCEPT OF QUALITY CONTROL AND FASHIONING IT INTO THEIR OWN HIGHLY SUCCESSFUL GAME STRATEGY.

LIKE THE JAPANESE, WE NEED TO ENCOURAGE, RECOGNIZE AND REWARD EXCEPTIONAL EFFORTS IN EXCELLENCE.

IN JAPAN, THE MOST PRESTIGIOUS ACHIEVEMENT A COMPANY CAN EARN IS THE DEMING PRIZE FOR OUTSTANDING STATISTICAL QUALITY CONTROL CONTRIBUTIONS.

THE DEMING PRIZE HAS COME TO BE ACCEPTED WORLDWIDE AS THE SUPREME STANDARD OF EXCELLENCE -- AND IN THAT THERE IS A CERTAIN TOUCH OF IRONY.

AS IF TO UNDERSCORE THE FACT THAT THEY SO SUCCESSFULLY IMPORTED AN AMERICAN PRODUCT, THE JAPANESE HAVE NAMED THEIR HIGHEST CORPORATE AWARD IN HONOR OF AN AMERICAN -- EDWARDS DEMING. AND YET THE COUNTRY WHICH PRODUCED SUCH QUALITY PIONEERS AS DR. DEMING AND DR. JURAN CAN BOAST OF NO SUCH AWARD OF ITS OWN.

I HOPE -- THROUGH HOUSE BILL HR812 -- THAT WE ARE ABOUT TO FILL THAT VOID BY ESTABLISHING A NATIONAL QUALITY IMPROVEMENT AWARD.

I WOULD LIKE TO REEMPHASIZE WHAT I SEE AS THE KEY POINTS OF SUCH AN AWARD.

FIRST --- IT MUST BE PRESTIGIOUS. BY HAVING THE PRESIDENT HIMSELF PRESENT THE AWARD, WE WOULD BE SENDING OUT A MESSAGE TO THE WORLD THAT 'MADE IN THE U.S.A.' IS MORE THAN JUST A LABEL. IT IS A PROUD BOAST.

SECOND -- THE AWARD MUST BE SELF-FUNDED.

WE'VE OFTEN BEEN ACCUSED OF SHORT-CHANGING THE AMERICAN CONSUMER IN THE PAST FEW YEARS. WE CERTAINLY HAVE NO RIGHT TO ASK THE AMERICAN TAXPAYER TO FOOT THE BILL WHEN IT COMES TO RECOGNITION OF QUALITY.

THIRD -- THE AWARD MUST BE WON THE OLD FASHIONED WAY -- IT MUST BE EARNED.

THE CRITERIA MUST BE RIGOROUS, REQUIRING INTENSIVE EVALUATION BY A PANEL OF HIGHLY QUALIFIED JUDGES AS WELL AS ON-SITE AUDIT AND VERIFICATION OF THE ACCOMPLISHMENTS TO BE CONSIDERED.

THE TIME IS RIPE FOR IMPROVED QUALITY IN AMERICAN PRODUCTS AND SERVICES -- AND THE RECOGNITION OF SUCH.

A DECADE AGO, ONLY FOUR OUT OF TEN BUYERS FELT THAT QUALITY WAS EQUAL TO, OR MORE IMPORTANT THAN PRICE. TODAY, EIGHT OUT OF TEN BUYERS IDENTIFY QUALITY AS IMPORTANT AS, OR MORE IMPORTANT THAN PRICE.

A DECADE AGO, MANY CONSUMERS DIDN'T MIND IF WE OCCASIONALLY BURNT THE TOAST -- AS LONG AS WE SCRAPED IT CLEAN. TODAY, THE CONSUMER CRY IS LOUD AND CLEAR -- "FIX THE TOASTER."

IT CAN BE ARGUED, OF COURSE, THAT QUALITY IS ITS OWN REWARD -- THAT NO RECOGNITION IS WARRANTED. SUCH LOGIC WOULD POINT TO THE SIMPLE PRIDE OF A JOB WELL DONE -- ALONG WITH THE VERY WARM FEELING WHICH ACCOMPANIES A HEALTHY BOTTOM LINE.

I BELIEVE WE NEED AN ADDITIONAL INCENTIVE TO INSPIRE THE PARTICIPANTS IN WHAT MAY WELL BE THIS NATION'S MOST MEANINGFUL COMPETITION. WE NEED SOMETHING TO RAISE THE LEVEL OF EVERYONE'S GAME TO A NEW PLATEAU. WE NEED TO ESTABLISH A BENCHMARK OF QUALITY BY WHICH CORPORATE AMERICA MAY BE MEASURED. AND WE NEED TO ALLOW THOSE COMPANIES WHICH ACHIEVE SUCH HEIGHTS TO SHOUT IT TO THE WORLD.

LAST OCTOBER AT THE FORTUNE MAGAZINE FORUM IN NEW YORK, THE CHAIRMAN AND CHIEF EXECUTIVE OFFICER OF WESTINGHOUSE PUT THE SUBJECT OF QUALITY IN PERSPECTIVE. ABOUT FIVE SECONDS INTO HIS SPEECH, DOUGLAS DANFORTH INSISTED THAT "QUALITY IS THE MOST POWERFUL WEAPON WE HAVE TO STRENGTHEN AMERICA'S COMPETITIVE ABILITY."

IN CLOSING, I'D LIKE TO POINT OUT THAT AMERICA'S TOP CORPORATE EXECUTIVES HAVE SELDOM BEEN KNOWN TO AGREE ON MUCH OF ANYTHING. HOWEVER, ON THE SUBJECT OF QUALITY, I THINK YOU'LL FIND THAT MOST OF US HAVE REACHED A CONCLUSION.

THE CONCLUSION IS THAT QUALITY IS A SERIOUS BUSINESS AND THAT BEHIND ALL THOSE CATCHY SLOGANS, WE'VE STILL GOT A LOT OF WORK TO DO.

I THINK CORPORATE AMERICA IS IN THE PROCESS OF DOING ITS PART. NOW IS THE TIME FOR SUCH EFFORTS TO BE ENCOURAGED, RECOGNIZED AND REWARDED. A NATIONAL AWARD FOR EXCELLENCE AND QUALITY CAN GO A LONG WAY IN SPEEDING UP OUR PROGRESS AND HELP US IMPROVE OUR COMPETITIVE POSITION IN THE WORLD MARKETPLACE.

THANK YOU FOR LISTENING AND FOR THE OPPORTUNITY TO APPEAR HERE TODAY.

5/14/86

JOHN J. HUDIBURG
CHAIRMAN OF THE BOARD & CHIEF EXECUTIVE OFFICER
FLORIDA POWER & LIGHT COMPANY

John Hudiburg has been with Florida Power & Light Company since 1951. A Georgia Tech graduate, he began as a student engineer and held various engineering and operating positions on his way to becoming FPL's President in 1979, its Chief Executive Officer in 1983 and Chairman of the Board in 1986.

Professionally he is a Director of the Electric Power Research Institute (EPRI), the Edison Electric Institute (EEI), and the Southeastern Electric Exchange (SEE). In 1980 he was awarded the American Society of Mechanical Engineer's "Outstanding Leadership Award for Energy Engineering Sciences."

John is an alumnus of the Harvard Business School's Advanced Management Program and currently serves on the National Advisory Board of Georgia Tech.

His civic activities include membership in the Florida Council of 100, and he is a director of the North Carolina National Bank of Florida and the Miami Children's Hospital. He was the 1984 Campaign Chairman for the Dade County United Way.

Mr. Walgren. We appreciate the testimony very much, Mr. Hudiburg.

Let us proceed now to Dr. Gryna.

Dr. Gryna. My name is Frank Gryna. I am Vice President of Juran Institute, Incorporated, an educational organization which provides training and consulting services relative to product quality.

I am here as a substitute for Dr. Joseph Juran, who is Chairman of Juran Institute. Due to a prior engagement, Dr. Juran was unable to appear. He has prepared a statement for the written record, and I will read highlights from that statement, and of course, I will be pleased to answer any questions.

Mr. Chairman, I strongly support the Committee's efforts to create a National Quality Improvement Award Act, as set out in H.R. 812, introduced on January 28, 1987.

To me the key words in that Act are "quality improvement." Let me underscore the importance of those key words by some real life examples.

In each of those examples, a team of American managers and engineers visited an affiliated Japanese company. The visit included a tour of the Japanese plants. The Americans were well versed in the technology of the business. To their trained eyes, the Japanese plant was technologically like their own home plant in the U.S.A.

The Japanese were using similar machinery, processes, instruments and materials. However, the results which came out of the Japanese plants were dramatically different.

The Japanese products were strongly preferred by the marketplace because they delivered better quality for the price. To be specific, consider a computer memory chip with 256 K random access memory. It has 256,000 circuit elements and right now is the most important memory chip on the market.

On August 18, 1986, Business Week Magazine reported that for every 100 chips fabricated, the typical number of saleable chips was as follows: For U.S. production, 17 saleable chips out of 100. For Japanese production, 54.

Given such a difference, it doesn't really matter what is the outcome of the lawsuits on dumping and unfair trade practices. There is simply no way of carrying out international competition against someone who gets three times as much saleable product from the same extent of facilities, materials and labor.

All those team visits, and comparisons such as the memory chips, leave most observers mystified. How is it possible to attain such superior results when the facilities are the same? A great deal of nonsense has been written to explain the mystery, but in my observation, the prime explanation can be heard from a witness invited by this Committee, John Hudiburg.

Six years ago in 1981, Florida Power & Light was regarded as a well-managed power utility. Today, it is widely perceived as the best. What happened to bring about that change in perception? Their facilities, power plants, transmission lines, office facilities, they are essentially like they were six years ago. Their people, their managers, their engineers, their workers, are essentially the same people who were on the job six years ago.

If the FPL facilities and people remained essentially unchanged during those six years, why did the results change so dramatically? In my observation, the reason is clear: During those six years, FPL created over 1,400 specific improvements in quality.

Now that is a revolutionary rate of improvement. Those improvements provided FPL customers with better service. In addition, the improvements have been highly cost effective.

The example of FPL goes far to explain the mystery of how so many Japanese companies have been able to outperform their U.S. counterparts in quality. The Japanese spend much more time on quality improvements.

Now here is the key. They make improvements at a pace much greater than that of their American counterparts. That is why the phrase "quality improvement," we urge, should be included in the title of this award.

The name proposed for the Award is the National Quality Improvement Award. I doubt that we can improve on that name. It puts the emphasis precisely where it should be.

Secondly, the Bill provides for making the award to "organizations which have substantially benefitted the economic or social well-being of the United States through improvements in the quality of their goods or services." This again puts the emphasis precisely where it should be.

Third, the Bill provides that Awardees may publicize the award in their advertising. I urge that this provision be retained. In Japan, this same feature is what lifted the Deming Prize from early obscurity to something of great national significance.

Fourth, the criteria for qualification include provision for an "intensive valuation" which is to "verify the accuracy of the advances claimed" and is to "encompass all aspects of the organization, as well as a results of its quality management system and provision for quality management in its future goals. The Award shall be given only to organizations which demonstrate quality management through the training and involvement of all levels of personnel in quality improvement."

In my view, the wording of this portion of the Bill is open to multiple interpretation. Systems, training and involvement are all part of the means used to secure quality improvement. However, no matter how logical are these means, an absolutely indispensible criterion for receiving the award should be results in the form of actual improvements made in quality.

I am sure that such is the intent of this Committee, but I believe that the present wording includes a risk of diluting the Committee's intent. We have many organizations, including Government organizations, in which the emphasis has for years been on the means for attaining quality.

For example, on complete written procedures, on statistical training and charts, on exhortation and slogans. Incidentally, we need to be careful about slogans.

America has several decades of experience of relying primarily on slogans to improve quality. I can report to you that it does not work.

If we are to have slogans, let them be as specific as possible. For example, a phrase "quest for excellence" should be made more specific, perhaps in terms of quest for excellence in quality.

I respectfully suggest that the last sentence I have quoted from the Bill, H.R. 812, page 7, lines 8 to 11, be reworded as follows: "The award shall be given only to organizations which have made outstanding improvements in the quality of their goods and services, and which in addition demonstrate the effective quality management through the training and involvement of all levels of personnel in quality improvement."

Finally, in an appendix attached to the written statement, I have included some draft revisions of a lessor sort. These are some minor changes in the wording. I respectfully suggest that the Committee Staff review that appendix.

That concludes my statement, Mr. Chairman.

[The prepared statement of Mr. Juran follows:]

STATEMENT BY

JOSEPH M. JURAN
CHAIRMAN OF THE BOARD
JURAN INSTITUTE, INC.

HEARINGS ON
NATIONAL QUALITY AWARD
BILL HR812

HOUSE SUBCOMMITTEE ON SCIENCE,
RESEARCH AND TECHNOLOGY

on 4 March 1987

17 February 1987

Mr. Chairman

My name is Joseph M. Juran. I am Chairman of Juran Institute, Inc., an educational organization which provides training and consulting services relative to product quality.

I have been associated with the subject of quality ever since 1924, first as engineer and manager in the Bell System, and since 1945, as an author, teacher and consultant.

In this field of quality I have authored the international reference works and textbooks. I have also developed the pioneering training courses for managers, and have conducted such training in about 40 countries around the world.

I welcome your invitation to reappear before this Committee. Due to a prior engagement I am unable to appear in person. My statement will therefore be read by Dr. Frank M. Gryna, Vice President of Juran Institute. Dr. Gryna has long been associated with the subject of quality, both in industry and education. Prior to joining Juran Institute he was Distinguished Professor of Industrial Engineering and Acting Dean of Engineering and Technology at Bradley University.

Mr. Chairman, I strongly support the Committee's efforts to create a National Quality Improvement Award Act as set out in HR812 of the 100th Congress.

To me the key words in that Act are Quality Improvement.

Let me underscore the importance of those key words by some real life examples I have encountered. In each of those examples a team of American managers and engineers visited an affiliated Japanese company. The visit included a tour of the Japanese plant.

The Americans were well versed in the technology of the business. To their trained eyes the Japanese plant was technologically like their own home plant in the USA. The Japanese were using similar machinery, processes, instruments, materials. However, the results which came out of the Japanese plants were dramatically different.

The Japanese products were strongly preferred by the market place because they delivered better quality for the price. In addition, the Japanese costs were distinctly lower. In the case of costs, it is easy to become confused if we try to compare dollars to yen. However, the teams made their comparisons in natural measures, for example:

They compared the number of hours of labor required to produce 100 units of good product

They compared the amount of material required to produce 100 units of good product

Such comparisons in natural terms leave no room for confusion.

To be very specific, consider a computer memory chip, the 256K random access memory (256K RAM). It has 256 thousand circuit elements and right now is the most important memory chip on the market. On August 18, 1986, the magazine Business Week reported that for every 100 chips fabricated, the typical number of salable chips was as follows:

US production -- 17

Japanese production -- 54

I have no problem accepting that report. Several years ago I researched that same phenomenon, except that at that time the most popular memory chip was the 16K RAM. I drew the same conclusion -- the Japanese yields were three times those prevailing in the US.

Given such a difference, it doesn't really matter what is the outcome of the lawsuits on dumping and unfair trade practices. There is simply no way of carrying out international competition against someone who gets three times as much salable product from the same extent of facilities usage, materials and labor hours.

All those team visits, and comparisons such as the memory chips, leave most observers mystified. How is it possible to attain such superior results when the facilities are the same? A great deal of nonsense has been written to explain the mystery but, in my observation, the prime explanation can be heard from a witness invited by this Committee.

Six years ago, in 1981, Florida Power and Light Company (FPL) was regarded as a well managed power utility. Today it is widely perceived as the best. What happened to bring about that change in perception? Their facilities -- power plants, transmission lines, office facilities -- are essentially like they were six years ago. Their people -- managers, engineers, workers -- are essentially the same people who were on the job six years ago.

If the FPL facilities and people remained essentially unchanged during those six years, why did the results change so dramatically? In my observation the reason is clear. During those six years FPL created over 1400 specific improvements in quality. That is a revolutionary rate of improvement. Those improvements provided FPL's customers with better service. In addition, the improvements have been highly cost effective.

To create that revolution required that FPL devote an unprecedented amount of time to improving quality. FPL paid that price, but it has been rewarded over and over again through providing better service to its customers, securing handsome cost reductions and establishing an enviable status in its community, in its industry and in society generally.

The example of FPL goes far to explain the mystery of how so many Japanese companies have been able to outperform their US counterparts in quality. The Japanese spend much more time on quality improvement, and they make improvements at a pace much greater than that of their American counterparts. These quality improvements are seldom capital intensive, so they are seldom obvious to those who look for differences in facilities.

Mr. Chairman, I have been stressing the importance of quality improvement because it has become so overwhelming a factor in national and international trade, and in the health and survival of the associated organizations. Now I turn to some specific provisions of the bill, HR812.

The name proposed for the award is National Quality Improvement Award. I doubt that we can improve on that name. It puts the emphasis precisely where it should be.

Secondly, the bill provides for making the award to -----"organizations which"---------"have substantially benefited the economic or social well-being of the United States through improvements in the quality of their goods or services-----." This again puts the emphasis precisely where it should be.

Third, the bill provides that awardees may publicize the award in their advertising. I urge that this provision be retained. In Japan this same feature is what lifted the Deming prize from early obscurity to something of great national significance.

Fourth, the Criteria for Qualification include provision for an "intensive valuation" which is to "verify the accuracy of the advances claimed" and is to "encompass all aspects of the organization, as well as results of its quality management system and provision for quality management in its future goals. The award shall be given only to organizations which demonstrate quality management through the training and involvement of all levels of personnel in quality improvement."

In my view, the wording of this portion of the bill is open to multiple interpretation. Systems, training and involvement are all part of the means used to secure quality improvement. However, no matter how logical are these means, the sine qua non of the Award should be results -- actual improvements made in quality. I am sure that such is the intent of this Committee, but I believe that the present wording includes a risk of diluting the Committee's intent.

We have many organizations, including government organizations, in which the emphasis has for years been on the means for attaining quality, e.g., on complete written procedures, on statistical training and charts, on exhortation and slogans. In too many organizations, preoccupation with these means has resulted in losing sight of the ends.

I respectfully suggest that the last sentence I have quoted from the bill (HR812, page 7, lines 8 to 11) be reworded as follows:

"The award shall be given only to organizations which have made outstanding improvements in the quality of their goods and/or services, and which in addition demonstrate effective quality management through the training and involvement of all levels of personnel in quality improvement."

In the attached Appendix A I have included some draft revisions of a lesser sort. I respectfully suggest that the Committee's staff review this Appendix A.

That concludes my statement, Mr. Chairman. Dr. Gryna will be glad to respond to any questions.

APPENDIX A

SUGGESTED REVISIONS TO HR812

Page 6, lines 12 and 13: Change the word "enterprise" to read "organization."

Page 7, line 4: Change the word "enterprise" to read "organization."

Page 7, line 5: Change the word "plant" to read "site."

Page 7, line 5: Change the word "advances" to read "quality improvements."

File 0939J

FRANK M. GRYNA JR.

Frank M. Gryna, Jr., who joined Juran Institute, Inc. in 1982 as Vice President, has participated as Dr. Juran's associate since 1971. During the years 1962-1982 Dr. Gryna was based at Bradley University where he served as Distinguished Professor of Industrial Engineering and as Acting Dean of the College of Engineering and Technology. In addition, he was consultant for various companies on the managerial and statistical aspects of quality and reliability programs, from initial design through field use.

Dr. Gryna also served the U.S. Army Signal Corps Engineering Labs and the Esso Research and Engineering Company. At the Space Systems Division of the Martin Company, he was Manager of Reliability and Quality Assurance.

He co-authored QUALITY PLANNING AND ANALYSIS with J. M. Juran and was Associate Editor of the Second and Third Editions of the QUALITY CONTROL HANDBOOK. His research report on "Quality Circles" received the Book of the Year Award sponsored by joint publishers and the Institute of Industrial Engineers. He is a fellow of the American Society for Quality Control, a Certified Quality Engineer, a Certified Reliability Engineer, and a Professional Engineer (Quality Engineering). He has been the recipient of various awards including the E. L. Grant Award of ASQC, Engineer of the Year Award of the Peoria Engineering Council, teaching and professional excellence awards from Bradley University, and the Award of Excellence of the Quality Control and Reliability Engineering Division of the Institute of Industrial Engineers. Dr. Gryna is also the recipient of the Ott Foundation Award, presented by the Metropolitan Chapter of The American Society for Quality Control.

Mr. **Walgren**. Thank you, Dr. Gryna. We certainly appreciate that because we are distracted generalists, at best, and those kinds of specific recommendations for language in that Bill are very helpful to us.

Mr. Eggleston.

Mr. **Eggleston**. Thank you, Mr. Chairman. I have provided a written statement that I would appreciate be entered into the record. I would just have a few words summarizing that statement.

IBM began a stepped-up quality management approach and the activities associated with it in the late 1970's, following and built upon the principles of the quality professionals, Dr. Juran, Dr. Deming and others, and combined with our own experience in semiconductor production and the requirement of process management in semiconductor production.

We came up with sort of our own mix of that that we call quality process management which we apply to all work. The results are fabulous.

In the period of time I mentioned, from 1980 to today, our products, the improvement in the defects, improvement in the repair actions that our customers see are measured in times–3 to 10 times–improvements, depending upon what product. Software products, the products we are shipping today are three to five times better than the products we were shipping four years ago.

The processes, not product processes, but processes in support of the product where we have applied this—an example being the distribution mechanism of distributing our software to our customers, in that case, we have seen improvement in reduction of errors by a factor of seven in a period of four years. Interestingly, as all the theorists will tell you, at the same time the productivity of that department doubled.

The output times doubled two per person employed in doing the work.

The net is that we believe, and are absolutely convinced that this improves the attractiveness of our products, reduces the cost to deliver them and that delivers competitiveness.

We believe anybody who is interested in competitiveness should be following this approach, and as a result we are in support of the Award and think that it can act as a motivator to other people starting to do this work in that it recognizes good American activity.

My suggestions are primarily, now that we have agreed upon what we want to do, how do we get it right? That is the focus of my suggestions.

I, like the testimony of Dr. Juran, believe that the Award should be based upon marketplace results. It should be something that the customer, the consumer, can see and understand, and not based upon the theory or the structure of how it is performed.

It should be continued improvement; not just improvement as of the moment. We must be very careful we don't create a layer of administrative or bureaucratic activity that the applicants would not perform if they were not applying for the Award.

The administration should depend upon what they have and what they do to deliver quality to their products and services.

I believe it should be administered by some of the expert institutions that understand quality management that exists, the American Society of Quality Control, or the American Productivity Center, or a combination of those, and not create yet another group of people.

We should be very careful in selecting the panel of judges for impartiality, for purity—and a lack of conflict of interest.

I hold out one caution, and that is, please be aware in the administration structure not to blindly copy what the Japanese have done. The differences in culture, and differences in relationships between Government and industry, make their administration, I believe, not totally applicable to the American scene. Parts of it are excellent, and other parts, I believe, would be detrimental.

The Award must be given by the President. It requires a motivation, the recognition, and the symbol of pride that goes with a Presidential Award.

And, lastly, once again, it should measure and be based upon sustained marketplace quality improvement.

Thank you, very much.

[The prepared statement of Mr. Eggleston follows:]

TESTIMONY OF WILLIAM W. EGGLESTON
IBM VICE PRESIDENT, QUALITY
INTERNATIONAL BUSINESS MACHINES CORPORATION

BEFORE THE HOUSE SCIENCE, RESEARCH AND TECHNOLOGY
SUBCOMMITTEE

ON H.R. 812, THE NATIONAL QUALITY ACT OF 1987

WEDNESDAY, MARCH 4, 1987

GOOD MORNING. I AM BILL EGGLESTON, VICE PRESIDENT QUALITY, IBM CORPORATION. I AM VERY PLEASED TO HAVE THE OPPORTUNITY TO APPEAR BEFORE THIS COMMITTEE TO DISCUSS IBM'S QUALITY IMPROVEMENT ACTIVITIES AS WELL AS THE PROPOSED NATIONAL QUALITY ACT OF 1987.

LET ME FIRST PROVIDE A SHORT HISTORICAL PERSPECTIVE. FROM ITS EARLIEST DAYS, IBM EMBODIED IN ITS BASIC BELIEFS A STRIVING: 1. FOR SUPERIOR PERFORMANCE IN ALL ACTIVITIES AND 2. TO PROVIDE THE BEST CUSTOMER SERVICE OF ANY COMPANY IN THE WORLD. THESE TWO BELIEFS PROVIDE THE FOUNDATION FOR OUR CURRENT QUALITY IMPROVEMENT ACTIVITIES.

IN THE LATE 1970'S IBM REDEDICATED ITSELF TO THE QUALITY IDEAL IN RECOGNITION OF CHANGING CUSTOMER REQUIREMENTS, INTERNATIONAL COMPETITIVE CAPABILITIES AND CHANGES IN INDUSTRY DIRECTION.

A SYSTEM OF QUALITY MANAGEMENT EVOLVED THROUGH THE APPLICATION OF SOME BASIC CONCEPTS, INCLUDING DEDICATED MANAGEMENT ACTION, PARTICIPATION BY ALL EMPLOYEES AND CONTINUOUS WORK IMPROVEMENT THROUGH ERROR AND DEFECT REDUCTION. THE IMPLEMENTATION OF THESE PRINCIPLES PRODUCED DRAMATIC IMPROVEMENT FIRST IN OUR PRODUCTS AND THEN IN OUR SUPPORT ACTIVITIES.

THESE PRACTICES, PLUS THE EXPERIENCE GAINED IN MANAGING OUR SEMICONDUCTOR PROCESSES, LED TO IBM'S CURRENT EFFORT TO PRACTICE A CONCEPT WE REFER TO AS QUALITY PROCESS MANAGEMENT. IT VIEWS ALL WORK ACTIVITY AS A PROCESS, WITH CONTINUOUS IMPROVEMENT OF THAT ACTIVITY AS A GOAL. OWNERSHIP OF THE PROCESS IS ESTABLISHED EARLY, FOLLOWED BY ANALYSIS, MEASUREMENT, CUSTOMER FEEDBACK AND IMPROVEMENT THROUGH WORK CHANGE, ELIMINATION AND SIMPLIFICATION. THE ULTIMATE OBJECTIVE IS TO DESIGN FOR QUALITY BY UNDERSTANDING AND MEETING CUSTOMER REQUIREMENTS, AND THUS IN THE END, TO DRAMATICALLY IMPROVE OUR COMPETITIVENESS.

I SUPPOSE IT IS OBVIOUS AS TO WHY THIS IS IMPORTANT; IT MAKES OUR PRODUCTS MORE ATTRACTIVE TO THE CUSTOMER AND REDUCES COSTS. EXAMPLES ABOUND IN IBM SHOWING ERROR AND DEFECT REDUCTION. WHENEVER IT OCCURS, INVARIABLY THE "COST OF QUALITY" IS ALSO REDUCED DRAMATICALLY.

LET ME ILLUSTRATE WITH AN EXAMPLE, NOT OF HIGH TECHNOLOGY, BUT RATHER OF OUR TYPEWRITER. BY CONCENTRATING ON QUALITY MANAGEMENT PRINCIPLES, THE NUMBER OF WARRANTY REPAIR ACTIONS WERE REDUCED FROM 1981 TO 1983 BY A FACTOR OF FOUR AND THROUGH 1984 BY A FACTOR OF EIGHT. WHEN THE NEW TECHNOLOGY WAS INTRODUCED IN 1984, WITH A DESIGN AIMED AT HIGH QUALITY, WARRANTY REPAIR ACTIONS WERE CUT A FURTHER TWO TIMES.

IMPLEMENTATION OF TECHNIQUES WILL VARY DEPENDING ON FUNCTION AND ORGANIZATIONAL UNIT, BUT THE QUALITY PRINCIPLES ARE ALWAYS THE SAME. FOR EXAMPLE, CORPORATE DIRECTION IS GIVEN TO IBM PRODUCT DEVELOPERS WITH THE INTENTION OF KEEPING OUR PRODUCTS BEST OF BREED. IT STATES SIMPLY THAT IN ORDER TO ANNOUNCE A NEW PRODUCT, IT MUST BE BETTER AT FIRST SHIPMENT, IN TERMS OF RELIABILITY AND QUALITY, THAN BOTH THE PRODUCT IT REPLACES AND THAT OF THE BEST COMPETITOR.

THE ACHIEVEMENT OF THESE RESULTS IS MORE CRITICAL TODAY THAN AT ANYTIME IN IBM'S HISTORY. THIS IS TRUE NOT SIMPLY BECAUSE TODAY'S COMPETITORS ARE VERY GOOD, BUT THAT OUR CUSTOMERS' RELIABILITY NEEDS ARE BECOMING EVER MORE DEMANDING. WE NOW HAVE PRODUCTS WHERE THE USER HAS A GOOD CHANCE OF NEVER CALLING FOR REPAIR SERVICE DURING THE PRODUCT'S USEFUL LIFE

THESE SAME RESULTS HAVE BEEN SEEN IN OUR BUSINESS PROCESS WORK; SUCH AS ORDER ENTRY, BILLING, ACCOUNTS RECEIVABLE, INVENTORY MANAGEMENT, AND ENGINEERING CHANGES. THIS MORE RECENT EFFORT IS ABOUT TWO YEARS OLD AND PROMISES IMPROVEMENT AT LEAST EQUAL TO THAT OF OUR PRODUCT EXPERIENCE. THE REWARDS ARE GREAT SINCE SO MUCH OF THE COST OF OPERATING A BUSINESS IS IN ADMINISTRATIVE ACTIVITIES SUCH AS THOSE REQUIRED TO ORDER AND DISTRIBUTE PRODUCTS, TO BILL AND COLLECT PAYMENT, AND ACTIVITIES THAT SUPPORT MANUFACTURING AND DEVELOPMENT. THE COST OF QUALITY IN THESE PROCESSES CAN BE ASTRONOMIC, BUT JUST AS IN PRODUCT, REDUCTION OF FAILURE COST PROVIDES QUICK PAYBACK.

IN SOFTWARE, IN PROGRAMS NOW COMPLETING, DEVELOPMENT QUALITY IS 3 TO 5 TIMES BETTER THAN IT WAS ONLY 8 YEARS AGO.

IN SOFTWARE DISTRIBUTION, A BUSINESS PROCESS SUPPORTING SOFTWARE, WE HAVE SEEN THE SAME KIND OF IMPROVEMENT. AS A RESULT OF THE PROCESS MANAGEMENT FOCUS, QUALITY IMPROVED BY A FACTOR OF 7 AND PRODUCTIVITY DOUBLED OVER A 2 YEAR PERIOD.

SO QUALITY IMPROVEMENT IS CRITICAL TO MAINTAINING OUR COMPETITIVE EDGE AND ACHIEVEMENT OF OUR GOALS. IT HAS RESULTED IN OUR NOW VIEWING DEFECTS IN TERMS OF PARTS PER MILLION RATHER THAN PERCENTAGES, AND IN SIGNIFICANT COST REDUCTIONS. AT IBM, QUALITY IMPROVEMENT IS NEVER ENDING WORK. BECAUSE OF THE CONSTANTLY CHANGING BUSINESS ENVIRONMENT, WORK PROCESSES MUST ALSO CHANGE IN ORDER TO REMAIN COMPETITIVE (JUST LIKE PRODUCTS).

LET ME TURN NOW TO THE SUBJECT OF A NATIONAL AWARD.

FOR THE REASONS I HAVE MENTIONED, WE BELIEVE EVERYONE SHOULD AGGRESSIVELY SEEK QUALITY IMPROVEMENT OR RISK THEIR CORPORATE SURVIVAL. THE QUESTION IS, "WILL A NATIONAL AWARD MOTIVATE OR ACT AS A CATALYST TO THAT ACTION?"

ROSABETH KANTOR, AUTHOR OF, "THE CHANGE MASTERS," SAID IN AN ARTICLE IN THE FEBRUARY 1987 ISSUE OF QUALITY PROGRESS MAGAZINE, "BEFORE IMPROVING QUALITY OR CHANGING THE CULTURE OR BUSINESS DIRECTION, PEOPLE AT EVERY LEVEL MUST UNDERSTAND AND BUY INTO THE VISION."

MY SUPPOSITION IS THAT CORPORATE SURVIVAL SHOULD CERTAINLY BE A STRONG MOTIVATOR TO CHANGE BEHAVIOR. A PRESTIGIOUS AWARD SHOULD CALL ATTENTION TO WHAT OTHERS HAVE ACCOMPLISHED AND HELP IN THE CREATION OF THE VISION. I BELIEVE IT WILL BE EFFECTIVE IN STIMULATING QUALITY IMPROVEMENT EFFORTS IF IT HAS THE FOLLOWING CHARACTERISTICS:

- IT MUST BE BASED UPON MARKET PLACE RESULTS.

- IT SHOULD REQUIRE NO ADDITIONAL OR BUREAUCRATIC ACTIVITY. NO REPORTING STRUCTURE SHOULD BE ESTABLISHED FOR THE SOLE PURPOSE OF COMPLIANCE WITH AWARD REQUIREMENTS.

- DATA REQUESTED WILL MOST LIKELY BE CONFIDENTIAL, MUST BE HELD IN TRUST, AND THEREFORE, MUST BE THE MINIMUM REQUIRED TO JUDGE PERFORMANCE.

- A PANEL OF JUDGES MUST BE CAREFULLY SELECTED TO ACHIEVE IMPARTIALITY AND TO AVOID CONFLICT OF INTEREST.

- AN EXISTING KNOWLEDGEABLE ORGANIZATION SUCH AS THE AMERICAN SOCIETY FOR QUALITY CONTROL (ASQC), OR THE AMERICAN PRODUCTIVITY CENTER OR A COMBINATION SHOULD BE USED TO ADMINISTER THE AWARD PROCESS.

- THE AWARD MUST BE GIVEN BY THE PRESIDENT. ANYTHING ELSE WILL BE INADEQUATE IN LENDING THE PRESTIGE REQUIRED TO MOTIVATE THE ACTIONS DESIRED.

- WE MUST BEWARE OF THE TEMPTATION TO COPY THE JAPANESE APPROACH. WHILE SOME PARTS MIGHT FIT A U.S. ENVIRONMENT, DUE TO DIFFERENCES IN CULTURE AND GOVERNMENT/INDUSTRY RELATIONSHIPS, OTHER ASPECTS COULD BE DISRUPTIVE.

- THE AWARD MUST COME AS A BY-PRODUCT OF QUALITY MANAGEMENT PERFORMANCE. THAT IS, WE SHOULD JUDGE ON THE BASIS OF RESULTS, NOT ON THE PRESENCE OF TECHNIQUES, HOWEVER GOOD OR WELL ACCEPTED THOSE TECHNIQUES ARE.

THIS LAST POINT IS CRITICAL TO SUCCESS. WE MUST BE CERTAIN THAT THE AWARD IS GIVEN TO COMPANIES THAT EXHIBIT SUSTAINED SUCCESS IN ACHIEVING REAL RESULTS. THIS WILL BE A MAJOR FACTOR IN THE AWARD'S CREDIBILITY AND MOTIVATIONAL FORCE. PRESENCE OF TECHNIQUE AND MANAGEMENT PROFILE CAN OCCUR QUICKLY, BUT IMPROVEMENT IN COMPETITIVENESS, THE BASIC PURPOSE, COULD TAKE YEARS.

FOR THESE REASONS I BELIEVE THE BILL SHOULD REFLECT THE POINTS RAISED IN THIS DISCUSSION TO MAXIMIZE ITS IMPACT.

I WILL BE PLEASED TO ANSWER ANY QUESTIONS.

WILLIAM W. EGGLESTON
IBM Vice President, Quality
International Business Machines Corporation

William (Bill) W. Eggleston, IBM vice president, quality, joined the IBM Corporation as a sales representative in Detroit in 1953.

He held several positions in marketing and product management before joining the Systems Development Division at the La Gaude laboratory, France, as systems manager, special communications project in 1966.

Mr. Eggleston returned to the United States in 1969 as location general manager of the General Systems Division's Boca Raton plant and laboratory, and was appointed vice president, marketing, Data Processing Division in 1972.

He was elected president and a member of the board of directors of IBM World Trade Americas/Far East Corporation in July 1975.

He was elected an IBM vice president in January 1979. He became president of the General Products Division in February 1979.

He was named directeur general des services techniques et fonctionnels, IBM Europe, and a member of the board of directors of IBM World Trade Europe/Middle East/Africa Corporation in September 1982. He was named to his present position in December 1984.

Mr. Eggleston holds B.A. and M.S. degrees from the University of Michigan.

# # #

June 1986

Mr. WALGREN. Thank you very much for all those comments. We understand the Administration is running with this bill, as well, which makes it a very live vehicle and something that should not really be controversial. There is no reason for it to be. Certainly, it is a relatively low cost.

Let me ask you all: Do you foresee difficulties in companies engaging in the auditing process—apparently, that has to cost something if you have a relatively comprehensive review of your operation by anybody on the outside.

[Pause.]

Mr. WALGREN. I just wanted to be sure I was right on that. It would seem that that is a pretty substantial effort for a company to go through, and although they don't have to go through with it, would the interest be there to look at themselves that carefully?

Mr. HUDIBURG. If I may respond. In the Japanese model, they have an organization known as Japanese Union of Science and Engineers, JUSE, who have several hundred academicians, primarily, who are—they call them counselors, but they are also the auditors. An organization, who would challenge for the Deming Award would have a group of these individuals—it depends on the size of the company, or organization, obviously—but it could be a couple dozen come in and spend a week or two with them. They have to pay for the direct cost.

Now, obviously a smaller organization or a much smaller one would have a proportionate reduced number auditors. While that may sound like a lot of money, the idea of having a couple dozen people visit with you from all over the United States for a week or two, just to give you an idea of the order of magnitude, we have been involved as deeply as any company could be, our size, in the whole movement. We are spending $6 million this year just on training alone of our employees.

So when you look at the magnitude of the effort that it takes to really do a first-rate job, and quality, and again, I agree with Mr. Eggleston, it pays off. It is money well spent. But the idea of the cost of the audit I don't think would be material.

Mr. WALGREN. And there would be the benefit that certainly there would be an objective—suggestions made in the process of that, or certainly redirection that company management might take in that process. Is that a factor?

Mr. HUDIBURG. Presumably you would be pretty confident of your accomplishments and your ability to succeed in your effort. Again, going back to the Japanese model, many companies do not get it the first year. They are not turned down, they just don't win. They are asked to return.

They do get audit findings given to them by which they can then improve their operation. So there is an element of what you say there, but that would not be the prime purpose at all of the audit. The audit would be to verify the accomplishments in quality improvement, again from the point of view of the customer.

There are other ways to go about getting people to come in and go about helping you improve your operation—less public ways.

Mr. EGGLESTON. Mr. Chairman. To your question of the burden, I don't think it would be much of a burden in that I think anybody who is really doing this audits themselves. That was really the key point that I was making earlier; as long as the panelists are skilled enough, they can use the information, the measurements that Florida Power Light uses or that IBM uses, or that Milliken uses, or whomever, rather than asking for yet another translation of activity.

If that is the case, then it is not a burden to anybody. It is obviously an activity, but it is not a burdensome activity.

Mr. WALGREN. Dr. Gryna.

Dr. GRYNA. Mr. Chairman, there is no question in my mind that there would be a strong desire on the part of many organizations to show what they have done. I completely am sympathetic with what Mr. Eggleston is saying, that those organizations who have become serious about quality, the facts are there. There is a relatively minor burden of presenting those facts in a way that will satisfy some outside auditors. But the desire to show what has been done is certainly present in many organizations.

Mr. WALGREN. You know, we often hear this thought that the Japanese model is one which we can only partially transfer to our country, or should only partly transfer; that they are culturally different and therefore we should be cautious in what we try to transfer.

Can you develop that a little bit in this area? Mr. Eggleston, you raised that thought, that we don't want to just be whole cloth reaching out and grafting something onto our efforts.

Mr. EGGLESTON. My experience with the Japanese method which comes from our Japanese subsidiary, which was involved in it; you discover that the auditing—and it isn't just a colleague from JUSE that is there to advise and to counsel, but there are review teams.

The review teams are made up of people from your industry, and we, in America, you couldn't do that in that you are suddenly in the middle of confidential and proprietary information. So the mix of the actual people in the industry into the work is something you wouldn't want to do.

Second, the report forms, and the structure of reporting and the management of it is uniform, across the whole of Japan. Therefore, you can go into any department—any company that is pursuing the award and go to any department and look for their measurement report, and it is precisely the same; precisely the same.

I humbly tell you that we could never get away with that in IBM. I don't know about the rest of America, but we could never get away from that uniformity, structure. There is too much innovation, too much individualism that has to come out and there is too much difference in market measurement. What are my customers after? What do they want? How do I measure that?

We should recognize, I believe, the difference between the structure that the Japanese culture can handle, its ability to mix very easily elements of the economy that we would not mix, to the other side of our independence, our innovativeness, and to our competitiveness amongst ourselves.

Mr. WALGREN. Anybody else have any comments on that general area?

Mr. HUDIBURG. The observation that the Japanese industries, through JUSE, have a very standard process is quite accurate.

That clearly could not be emulated here. But the focus on results and quality.

I will give you an example. In my company, we have gone in three years from an average of 100 minutes per customer per year interruption—that is a standard we use. In other words, the average customer was out 100 minutes, to be low 70 in three years.

That is a measurement that doesn't need—it is understandable and there are ways to look at quality in any service or manufacturing operation that are equally valid. So while the methodology will be different and the model won't be the same as the Japanese, I think the meaningfulness of the award can be maintained, notwithstanding.

Mr. WALGREN. Mr. Ritter.

Mr. RITTER. Thank you, Mr. Chairman. I think this is a very important set of hearings because I think a prize such as this is very important for our future as a world competitor. Although the number of people here maybe doesn't reflect that, I think what you have done in your various companies and in the institute is just very crucial to our success in the future.

I want to commend all of you and thank you for being here.

I have a couple of questions about this award. One is, the National Quality Improvement Award has a ring to it that specialists will understand but lay people will not. I am little concerned about something like this being lost in the great shuffle of America's media. It has been mentioned that calling it the Deming Award would somehow show that we were copying the Japanese, it wouldn't be appropriate.

But we call the Nobel Prize—the Nobel Prize. It is not the prize for superior achievement in science to the public. It is the Nobel Prize. I would suggest that we call this the Deming Award because a lot of people will understand who Dr. Deming is and that number will grow—it is growing remarkably on a daily basis. Companies are getting involved in these kinds of programs at Juran Institute, and Dr. Deming, of promoting.

I think we need to make this person-centered, and I am absolutely convinced we have to have it given by the President. To have it given by a Secretary of a Federal Agency whom the great majority of people do not know is, I think, to underrate the importance of the award. I know we have had some problems there, but that is the kind of thing now, as the Chairman said, the President has embraced it as part of his competitiveness package—I think we can get a better response on his actually or the President actually being the giver of such an award.

What are some of your thoughts on the name here? What is in a name? A rose by any other color would smell just as sweetly, but I think a lot is in a name when you talk about public perception and advertising.

Dr. GRYNA. May I make a comment? If in the wisdom of the Committee you feel that establishing the award with the name of a person in the title is appropriate, I would disagree that the award be called the Deming Award. I have been a quality professional my entire career. I have often said as a young professional, when I got stuck on some statistical problems with respect to quality, I reached for one book. The book was written by Ed Deming, whom all of us regard as absolutely top-flight expert in the area of statistical methods in quality.

Now, I feel very strongly that what it takes to improve quality very much includes statistical methods and many, many other concepts and techniques covering managerial, engineering and a wide range of other types of inputs.

I think naming the award after someone who is most highly noted for his major contributions in the area of statistics, would frankly cause some confusion in the broad scope of the award.

Mr. **Ritter**. Any other comments, Mr. Hudiburg?

Mr. **Hudiburg**. Well, again, going back to the Deming Award, it wasn't as highly regarded in the beginning, and in fact it was given by I don't know who, some obscure person in the beginning. It is now handed out by the Emperor.

The standing and status of such an award here in the United States would be expected to grow, and it would depend I think on the quality of the recipients, more than anything else, over time.

I had at one point thought that maybe it could be named the President's National Quality Award, or something of that nature, and it could subsequently be renamed and come from the President himself. In talking to the people over at Commerce, they were a reluctant to give it that status from the very beginning.

But that would be an alternative.

Mr. **Ritter**. Mr. Eggleston.

Mr. **Eggleston**. I don't believe anybody would be confused by the President's Quality Award, as to what it meant.

Mr. **Ritter**. That might be a way of putting it, the President's Quality Improvement. Did I hear that "improvement" should be in there? Yes, I believe that very strongly myself, because quality is like something—it is like truth, you always seek the complete truth; you never actually get there, but it is a good way to live.

I think the same is true with quality. I have another question: How does a cash award get distributed? Just talking about the mechanics of something like this; the workers wanting to be a part of a competition for this.

How do the workers see an award that goes to a company in cash? Does it go to a Christmas party fund?

Mr. **Hudiburg**. I don't envision it as having any cash aspects to it. In fact, the would thing could be very modest, just a little medallion. It is what it represents that is the value.

Speaking, however, of our own employees. We thought that they might have some reluctance to get into something, and I think in many instances in the United States, quality got confused with productivity, and it did meet some resistance.

So when we began the whole idea of quality improvement teams, and so on, we did so tentatively. But it has been the most enthusiastically embraced things our employees have ever been involved in. It is very much a participative management style in Florida Power and Light. Our employees are very much caught up in the enthusiasm.

Mr. **Ritter**. I would like to see this award as a kind of competitor, if you will, to the Nobel Prize. The Nobel Prize is given for achievement in science and it has a major cash award to it, but the differences is one award goes to a team and the other award goes to an individual.

But, again, Americans understand—the American people understand something when it has financial value connected with it. It enhances the impact. Is it possible—I know there are ideas to endow such an award, as I understand, via the private sector. Then I guess there is a tough interface between the award and the team.

Dr. Gryna, have you wrestled with this at all?

Dr. **Gryna**. I have not faced that issue directly, but I certainly would second what Mr. Hudiberg is saying. I think American workers would respond extremely positively to their organization getting an award, having the prestige that this award would have. They would not look for some additional monetary connection with that, themselves, personally.

Mr. **Ritter**. Even to make it somewhat competitive with Nobel Prizes would seem to be both prestige and a kind of glamour given to it by the financial reward. I think it is something we need to discuss further.

What about the number of companies—what kind of inroads in a mass scale have we been making in continuous product improvement, process improvement, quality improvement? What percentage of America's manufacturers today are heavily involved, or providers of goods and services, are heavily involved in this kind of an approach? Do you have any idea from the institute? Do you keep records of that kind?

Dr. **Gryna**. We don't keep records that would explicitly answer your question, but I certainly can say this: In the past half dozen years, we have seen more movement from organizations at the level of the John Hudiburg's—at the very, very top level of the organization. More movement at their level than has happened for the past several decades.

To us, that is extremely significant. That is new.

Mr. **Hudiburg**. If I might give some evidence to support that. We have achieved within the quality fraternity some notoriety, and we are constantly being called by organizations wanting to find out what we are doing, to the point we are swamped.

So we have developed a process where we say on the last Tuesday of each month, we have a one-day seminar. If you will come down at your own expense to Miami—it is free—we will let you participate in that.

To date, we have had over 500 organizations come down to see what we are doing. Some of them send as many as ten people. In fact, we are inundated with requests. We had a four-month waiting list the last time I looked.

The interest in the whole issue of quality in the United States is really catching on fire. Now what portion of companies are doing a real first-rate job now? They are very limited now, but there are a lot of organizations that are getting onboard and are going to be doing quite a bit, including I might say, not just manufacturing or service companies that are in the profit-making sector, but also a large number of governmental organizations. We are helping some of the local municipalities improve their quality, and a lot of nonprofit organizations, we will invariably in our seminars have hospitals and others coming in.

So, how high is up? A lot of organizations are improving and are determined to improve.

Mr. RITTER. Mr. Eggleston.

Mr. EGGLESTON. We experienced the same thing. A part of the thing that is in support of what Mr. Hudiburg just said is that you are doing this, you are out looking at what other people are doing. You quickly stop being introspective, and there is a lot of similarity in advice you can get from anyone, any where. We see two kinds of people coming to us, and companies we go to visit, which is people are practicing and we are trying to learn techniques from them, and executives of companies who are contemplating—should I? Is it real? Are the paybacks what I have heard them to be? How do I get started from here?

The spectrum is very broad, from tiny to large in all industries and I don't know how to answer your question of what percent? It is just an awful lot of activity.

Mr. RITTER. I have one other comment, Mr. Chairman, and it kind of ties in the question; ties in the earlier testimony by Dr. Bruce Merrifield. Were you here at that time? Two of you were here.

That is interesting, because Dr. Merrifield mentioned three crucial areas. Whatever else is done on some of the other areas, he mentioned three crucial areas that were essential to the success of America's manufacturing.

I think he did focus to some extent on manufacturing there.

He talked about the next generation of technology, as evolved by the basic research foundation. He talked about engaging in flexible manufacturing, computer integrated manufacturing, flexible manufacturing, and he talked about lifelong reskilling. He talked about this gap between jobs available and skills available. He didn't mention continuous improvement. He didn't mention quality improvement.

In my own mind, in the reading I have done, it seems to me that if there is a fourth, or if there is perhaps a first, it is continuous improvement. It is quality improvement.

What are your views? Where do you see this in the competitive debate? What kind of rank should the Chairman and I and our Members given to this as opposed to these other highly important issues? Mr. Eggleston.

Mr. EGGLESTON. I live in a company that has many different functional people, and all of them don't use the word quality. My manufacturer talks about continuous flow manufacturing. What he is talking about is improving a process. He is talking about a competitive manufacturing process, and when you dig under it, you can't separate what he is talking about from process management and what we would call quality process management.

Improvement, absolutely. So you will find that people will talk about, or put a label on something like process management, or on innovation. What they are talking about is improving that, and that is exactly what this is about.

Mr. RITTER. Do they use the terminology? Is the religion sufficiently spread throughout these different levels, that it is the goal, the real goal, the real focus? Is that there yet? Are we there yet?

Mr. EGGLESTON. Yes; in that, how are they talking about improvement? Reducing transaction time, reducing unit cost, reducing defect——

Mr. RITTER. How do you rate this issue in terms of competitiveness debate? That is I think what could be interesting?

Mr. EGGLESTON. I don't know how you are competitive unless you are doing this. It has to be "the", right up at the top of the list of things to do.

Mr. RITTER. Is this more important than gaining access to foreign markets, having reciprocity and more equity in trade?

Mr. EGGLESTON. I am not talking about where the market is.

Mr. RITTER. But I am saying, as we consider the competitiveness debate in the Congress, what kind of weight do we give to this kind of in-house, internal, get-your-act-together, perform better process? Where does it stand with basic research and retraining and training, and flexible manufacturing, and trade? Where does this thing come out?

Mr. HUDIBURG. If I may respond a little bit. I don't see that there is any conflict. We are really talking about, in some cases means, and in other cases results. The issue of quality, I quoted Danforth of Westinghouse, that it was paramount in his view in our ability to compete.

I was talking to the CEO of International Paper, and I wouldn't have ever really considered that craft paperboard was a thing where quality would be a competitive issue, but he said it had in fact become that.

So, when you travel in Europe or in Japan or elsewhere, and you talk about buying American products, and they say, frankly, you don't make many things we want to buy.

So, I believe it is an essential first step that American industry product quality products and services if we are to compete at all. So there is no conflict, but it is two sides of the same coin.

Mr. RITTER. Dr. Gryna.

Dr. GRYNA. With respect to competitiveness, there have been factual studies made that establish a clear relationship between where an organization stands in the marketplace on quality and their share of market and return on investment. The facts are very clear on that.

Mr. RITTER. If I might interrupt; if you could provide that to the Subcommittee, we would be most appreciative.

Dr. GRYNA. We would be happy to.

[Information to be furnished follows:]

MARCH 9, 1987.

Juran Institute was pleased to contribute to the hearings on H.R. 812.

In response to a question from one of the members of the sub-committee, I mentioned the existence of studies that related the quality reputation of an organization to business success. I was asked to provide information on such studies to the subcommittee. Listed below are three sources of information:

1. One study showed a correlation between competitive quality and share of market for a sample of 521 businesses:

NUMBER OF BUSINESSES IN THESE ZONES OF SHARE OF MARKET

Quality versus competitors	Percent—		
	Under 12	12 to 26	Over 26
Inferior	79	58	35
Average	51	63	53
Superior	39	55	88
Total	169	176	176

The reference is "Impact of Strategic Planning on Profit Performance", by Schoeffler, Buzzell and Heany. Harvard Business Review, March-April 1974, pp. 137-145.

2. A survey of 125 senior marketing executives as to their first preference for their own product superiority showed the following:

Marketing executives giving first preference to this form

Form of product superiority:	*Percent*
Superiority quality	40
Lower price (or better value)	17
More features, options, or uses	12
All others	31

The reference for the above survey is "New Product Pressures" by Hopkins and Bailey, The Conference Record, June 1971, pp. 16-24.

3. The studies cited in (1) and (2) show the impact of quality on the sales income of an organization. An additional perspective is gained by examining the quality of work activities on internal costs of an organization. Based on the observations of Juran Institute with a wide variety of organizations, we believe that about one-third of the resources in an organization are spent correcting work errors and deficiences. The ratio of one-third applies to manufacturing, service, and government organizations.

Let us know if we can be of any further assistance to you.

Best regards,

FRANK M. GRYNA, *Vice President.*

Dr. GRYNA. You mentioned the three actions mentioned earlier this morning. To me, all of those actions are part of the many kinds of things that have to be done to improve quality. I see no conflict there whatsoever.

Now let me just go beyond that. One of the exiting new things that is happening, and frankly, I hold up IBM as an example of a leader in this regard, are those manufacturing organizations who now fully understand that quality is not just a problem on the production floor, dealing with the physical product, but quality is a problem with respect to all processes in the generic sense as Mr. Eggleston is using it.

There is a growing, strong trend now for organizations to extend the quality concepts far beyond the manufacturing floor itself, and go into all the other areas that he mentioned. The other counterpart of that, of course, is the wonderful work on quality being done in the service industries, such as Florida Power and Light.

Mr. RITTER. Thank you, Mr. Chairman. Thank you, gentlemen.

Mr. WALGREN. Thank you, Mr. Ritter. We certainly salute the interest and the leadership that has been brought to us by the Minority Side, and particularly Mr. Ritter, and want to on behalf of the Committee thank you for your contribution.

We do appreciate being able to talk with you about these things. We think we have a contribution to make here.

It is hard for it to be real to us, just as it is hard for perhaps people in a company to actually realize something unless they deal with it. In many ways, we can't deal with it because we are removed from you and all we can do is hear you.

So you do represent an important input to us and we want to try to understand it as fully as we possibly can and appreciate the way you have come forward to the committee in helping us do that.

So thank you, very much, and we look forward to working with you in the future on this and other matters.

Thank you.

Without objection, we will insert the various letters, statements and various reports and later submissions into the record.

[Whereupon, at 12:50 p.m., the hearing in the above-entitled matter was concluded.]

[Additional material submitted for the record follows:]

100TH CONGRESS
1ST SESSION

H. R. 812

To amend the Stevenson-Wydler Technology Innovation Act of 1980 to establish a National Quality Improvement Award, with the objective of encouraging American business and other organizations to practice effective quality control in the provision of their goods and services.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 28, 1987

Mr. WALGREN (for himself and Mr. BOEHLERT) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

---

A BILL

To amend the Stevenson-Wydler Technology Innovation Act of 1980 to establish a National Quality Improvement Award, with the objective of encouraging American business and other organizations to practice effective quality control in the provision of their goods and services.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "National Quality Improvement Award Act of 1987".

SEC. 2. FINDINGS AND PURPOSES.

(a) FINDINGS.—The Congress finds and declares that—

(1) the leadership of the United States in product and process quality has been challenged strongly (and sometimes successfully) by foreign competition, and our Nation's productivity growth has decreased in relation to our competitors over the last two decades;

(2) failure to alter these trends will lead to a lower standard of living and less opportunity for all Americans;

(3) although several other factors may have contributed, the year 1985 saw Japan becoming the world's top creditor nation while the United States became a net debtor nation for the first time;

(4) in Japan, the Union of Japanese Scientists and Engineers sponsors a national quality award—the Deming Prize—which provides a powerful incentive to Japanese companies to promote quality improvement;

(5) American business and industry are beginning to understand that improved quality of goods and services goes hand in hand with improved productivity, lower costs, and increased profitability;

(6) quality improvement programs, through a commitment to excellence in manufacturing and services, are becoming more and more essential to the well-being of our Nation's economy and our ability to compete effectively in the global marketplace;

(7) the concept of quality improvement is directly applicable to manufacturing as well as service industries, to private enterprise as well as the public sector, and to large companies as well as small;

(8) in order to be successful, quality improvement programs must be management-led and customer-oriented and this may require fundamental changes in the way companies and agencies do business; and

(9) a national quality improvement award program of this kind in the United States would help improve quality and productivity by—

(A) helping to stimulate American companies to improve quality and productivity for the pride of recognition while obtaining a competitive edge through increased profits,

(B) recognizing the achievements of those companies which improve the quality of their goods and services and providing an example to others,

(C) establishing guidelines and criteria that can be used by business, industrial, governmental, and other organizations in evaluating their own quality improvement efforts, and

(D) providing specific guidance for other American organizations that wish to learn how to manage for high quality by making available detailed information on how winning organizations were able to change their cultures and achieve eminence.

(b) PURPOSE.—It is the purpose of this Act to provide for the establishment and conduct of a national quality improvement program under which (1) awards are given to selected companies and other organizations in the United States that practice effective quality management and as a result make significant improvements in the quality of their goods and services, and (2) information is disseminated about the successful strategies and programs.

SEC. 3. ESTABLISHMENT OF NATIONAL QUALITY IMPROVEMENT AWARD PROGRAM.

(a) IN GENERAL.—The Stevenson-Wydler Technology Innovation Act of 1980 is amended by redesignating sections 16, 17, and 18 as sections 17, 18, and 19, respectively, and by inserting after section 15 the following new section:

"SEC. 16. NATIONAL QUALITY IMPROVEMENT AWARD.

"(a) ESTABLISHMENT.—There is hereby established a National Quality Improvement Award, which shall be evidenced by a medal of such design and materials and bearing such inscriptions as the President, on the basis of recommendations submitted by the Office of Science and Technology Policy, may prescribe.

"(b) MAKING AND PRESENTATION OF AWARD.—(1) The President or his designee shall periodically make the award, on the basis of recommendations received from the Secretary, to companies and other organizations which in his judgment have substantially benefited the economic or social well-being of the United States through improvements in the quality of their goods or services resulting from the effective practice of quality management, and which as a consequence are deserving of special recognition.

"(2) The presentation of the award shall be made by the President or his designee with such ceremonies as he may deem proper.

"(3) An organization to to which an award is made under this section, and which agrees to help other American organizations improve their quality management, may publicize its receipt of such award and use the award in its advertising, but it shall be ineligible to receive another such award in the same category for a period of 5 years.

"(c) CATEGORIES IN WHICH AWARD MAY BE GIVEN.—(1) Subject to paragraph (2), separate awards shall be made to qualifying organizations in each of the following categories:

"(A) Small businesses.

"(B) Companies, including discrete divisions of companies.

"(C) Units of government.

"(D) Other organizations.

"(2) The Secretary may at any time expand, subdivide, or otherwise modify the list of categories within which awards may be made as initially in effect under paragraph (1), upon a determination that the objectives of this section would be better served by such expansion or modification.

"(3) Not more than two awards may be made within any subcategory in any year (and no award shall be made within any category or subcategory if there are no qualifying enterprises in that category or subcategory).

"(d) CRITERIA FOR QUALIFICATION.—(1) An enterprise may qualify for an award under this section only if it—

"(A) applies to the Director of the National Bureau of Standards (in this section referred to as the 'Director') in writing for the award,

"(B) permits a rigorous evaluation of the way in which its business and other operations have contributed to improvements in the quality of goods and services, and

"(C) meets such requirements and specifications as the Secretary, after receiving recommendations from the Board of Overseers established under paragraph (2)(B) and the Director, determines to be appropriate to achieve the objectives of this section.

In applying the provisions of subparagraph (C) with respect to any organization, the Director shall rely upon an intensive evaluation by a competent board of examiners which shall review the evidence submitted by the enterprise and, through a plant visit, verify the accuracy of the advances claimed. The examination should encompass all aspects of the organization, as well as results of its quality management system and provision for quality management in its future goals. The award shall be given only to organizations which demonstrate quality management through the training and involvement of all levels of personnel in quality improvement.

"(2)(A) The Director may, under appropriate contractual arrangements, carry out his responsibilities under subparagraphs (A) and (B) of paragraph (1) through one or more broad-based nonprofit entities which are leaders in the field of quality management and which have a history of service to society.

"(B) The Secretary shall appoint a board of overseers for the award, consisting of at least five persons selected for their preeminence in the field of quality management. This board shall meet annually to review the work of the contractor or contractors and make such suggestions for the improvement of the award process as they deem necessary. The board shall report the results of the award activities to the

Director each year, along with their recommendations for improvement of the process.

"(e) INFORMATION AND TECHNOLOGY TRANSFER PROGRAM.—The Director shall provide information about the awards and the successful quality improvement strategies and programs of the award-winning participants to all participants and other appropriate groups.

"(f) FUNDING.—The Secretary is authorized to seek and accept gifts from public and private sources to carry out the program under this section. If additional sums are needed to cover the full cost of the program, the Secretary shall impose fees upon the organizations applying for the award in amounts sufficient to provide such additional sums.

"(g) REPORT.—The Secretary shall prepare and submit to the President and the Congress, within 3 years after the date of the enactment of this section, a report on the progress, findings, and conclusions of activities conducted pursuant to this section along with recommendations for possible modifications thereof.".

(b) CONFORMING AMENDMENT.—Section 9(d) of such Act is amended by striking "or 16" and inserting "16, or 17".

LEF960

AMENDMENT (IN THE NATURE OF A SUBSTITUTE) TO H.R. 812
OFFERED BY MR. WALGREN

Strike out all after the enacting clause and insert in lieu thereof the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the ``National Quality Award Act of 1987´´.

SEC. 2. FINDINGS AND PURPOSES.

(a) FINDINGS.--The Congress finds and declares that--

(1) the leadership of the United States in product and process quality has been challenged strongly (and sometimes successfully) by foreign competition, and our Nation's productivity growth has decreased in relation to our competitors over the last two decades;

(2) failure to alter these trends will lead to weaker United States businesses, a lower standard of living, and less opportunity for all Americans;

(3) American business and industry are beginning to understand that poor quality costs companies as much as 20 percent of sales revenues nationally, and that improved quality of goods and services goes hand in hand with improved productivity, lower costs, and increased profitability;

(4) strategic planning for quality and quality improvement programs, through a commitment to excellence in manufacturing and services, are becoming more and more essential to the well-being of our Nation's economy and our ability to compete effectively in the global marketplace;

(5) greater emphasis on statistical process control, worker involvement in quality, and improved management understanding of the factory floor can lead to dramatic improvements in the cost and quality of manufactured products;

(6) the concept of quality improvement is directly applicable to service industries as well as manufacturing, to private enterprise as well as the public sector, and to large companies as well as small;

(7) in order to be successful, quality improvement programs must be management-led and customer-oriented and this may require fundamental changes in the way companies and agencies do business;

(8) several major industrial nations have successfully coupled rigorous private sector quality audits with national awards giving special recognition to those enterprises the audits identify as the very best; and

(9) a national quality award program of this kind in

the United States would help improve quality and productivity by--

(A) helping to stimulate American companies to improve quality and productivity for the pride of recognition while obtaining a competitive edge through increased profits,

(B) recognizing the achievements of those companies which improve the quality of their goods and services and providing an example to others,

(C) establishing guidelines and criteria that can be used by business, industrial, governmental, and other organizations in evaluating their own quality improvement efforts, and

(D) providing specific guidance for other American organizations that wish to learn how to manage for high quality by making available detailed information on how winning organizations were able to change their cultures and achieve eminence.

(b) PURPOSE.--It is the purpose of this Act to provide for the establishment and conduct of a national quality improvement program under which (1) awards are given to selected companies and other organizations in the United States that practice effective quality management and as a result make significant improvements in the quality of their goods and services, and (2) information is disseminated about the successful strategies and programs.

SEC. 3. ESTABLISHMENT OF NATIONAL QUALITY AWARD PROGRAM.

(a) IN GENERAL.--The Stevenson-Wydler Technology Innovation Act of 1980 is amended by redesignating sections 16, 17, and 18 as sections 17, 18, and 19, respectively, and by inserting after section 15 the following new section:

``**SEC. 16. NATIONAL QUALITY AWARD.**

``(a) ESTABLISHMENT.--There is hereby established a National Quality Award, which shall be evidenced by a medal bearing the inscription `A Quest for Excellence'. The medal shall be of such design and materials and bear such additional inscriptions as the Secretary may prescribe.

``(b) MAKING AND PRESENTATION OF AWARD.--(1) The President (on the basis of recommendations received from the Secretary), or the Secretary, shall periodically make the award to companies and other organizations which in his judgment have substantially benefited the economic or social well-being of the United States through improvements in the quality of their goods or services resulting from the effective practice of quality management, and which as a consequence are deserving of special recognition.

``(2) The presentation of the award shall be made by the President or the Secretary with such ceremonies as he may deem proper.

``(3) An organization to which an award is made under this section, and which agrees to help other American organizations improve their quality management, may publicize its receipt of such award and use the award in its advertising, but it shall be ineligible to receive another such award in the same category for a period of 5 years.

``(c) CATEGORIES IN WHICH AWARD MAY BE GIVEN.--(1) Subject to paragraph (2), separate awards shall be made to qualifying organizations in each of the following categories:

``(A) Small businesses.

``(B) Companies.

``(C) Discrete divisions of companies.

``(2) The Secretary may at any time expand, subdivide, or otherwise modify the list of categories within which awards may be made as initially in effect under paragraph (1), and may establish separate awards for other organizations including units of government, upon a determination that the objectives of this section would be better served thereby.

``(3) Not more than two awards may be made within any subcategory in any year (and no award shall be made within any category or subcategory if there are no qualifying enterprises in that category or subcategory).

``(d) CRITERIA FOR QUALIFICATION.--(1) An enterprise may qualify for an award under this section only if it--

``(A) applies to the Director of the National Bureau of Standards, in writing, for the award, ``(B) permits a rigorous evaluation of the way in which its business and other operations have contributed to improvements in the quality of goods and services, and

``(C) meets such requirements and specifications as the Secretary, after receiving recommendations from the Board of Overseers established under paragraph (2)(B) and the Director of the National Bureau of Standards, determines to be appropriate to achieve the objectives of this section.

In applying the provisions of subparagraph (C) with respect to any organization, the Director of the National Bureau of Standards shall rely upon an intensive evaluation by a competent board of examiners which shall review the evidence submitted by the enterprise and, through a plant visit, verify the accuracy of the advances claimed. The examination should encompass all aspects of the organization, as well as results of its quality management system and provision for quality management in its future goals. The award shall be given only to organizations which demonstrate quality management through the training and involvement of all levels of personnel in quality improvement.

``(2)(A) The Director of the National Bureau of Standards shall, under appropriate contractual arrangements, carry out his responsibilities under subparagraphs (A) and (B) of paragraph (1) through one or more broad-based nonprofit entities which are leaders in the field of quality management and which have a history of service to society.

``(B) The Secretary shall appoint a board of overseers for the award, consisting of at least five persons selected for their preeminence in the field of quality management. This board shall meet annually to review the work of the contractor or contractors and make such suggestions for the improvement of the award process as they deem necessary. The board shall report the results of the award activities to the Director of the National Bureau of Standards each year, along with their recommendations for improvement of the process.

``(e) INFORMATION AND TECHNOLOGY TRANSFER PROGRAM.--The Director of the National Bureau of Standards shall ensure that all program participants receive the complete results of their audits as well as detailed explanations of all suggestions for improvements. He shall also provide information about the awards and the successful quality improvement strategies and programs of the award-winning participants to all participants and other appropriate groups.

``(f) FUNDING.--The Secretary is authorized to seek and accept gifts from public and private sources to carry out the program under this section. If additional sums are needed to cover the full cost of the program, the Secretary shall impose fees upon the organizations applying for the award in amounts sufficient to provide such additional sums.

``(g) REPORT.--The Secretary shall prepare and submit to the President and the Congress, within 3 years after the date of the enactment of this section, a report on the progress, findings, and conclusions of activities conducted pursuant to this section along with recommendations for possible modifications thereof.´´.

(b) CONFORMING AMENDMENT.--Section 9(d) of such Act is amended by striking ``or 16´´ and inserting ``16, or 17´´.

Amend the title so as to read: ``A Bill to amend the Stevenson-Wydler Technology Innovation Act of 1980 to establish a National Quality Award, with the objective of encouraging American business and other organizations to practice effective quality control in the provision of their goods and services.''.

APPENDIX

U.S. DEPARTMENT OF COMMERCE

- - - -

PRIVATIZATION PROPOSAL FOR THE NATIONAL TECHNICAL INFORMATION SERVICE

OCTOBER 1986

EXECUTIVE SUMMARY

In December of 1985, the Office of Management and Budget asked the Department of Commerce to develop a proposal for privatizing the operations of the National Technical Information Service. The study leading to this proposal was conducted by an intra-Departmental Task Force using a process which encouraged participation by government agencies, NTIS customers and companies in the information industry.

NTIS is a $22 million program which provides the public and business community with access to government sponsored scientific and technical information. One clear message which comes from a detailed review of the program is that NTIS is a very complex operation. Built up over the past forty years, it is a system of relationships and dependencies involving over 350 NTIS and Commerce support staff, several hundred source agencies, thousands of customers and almost one hundred private firms in the United States and dozens of foreign countries.

Another message is that NTIS must be counted among the most privatized of Federal agencies. It is not clear whether the extent of privatization is because of the opportunities presented by the complexity of NTIS operations or despite the constraints imposed by these complexities. What is clear is that because of its legislative requirement to be self-supporting, NTIS receives no appropriated funds for its basic operation, pays its salary and other costs from user fees, is driven to operate as efficiently as possible, creates market opportunities for a large number of private firms, and satisfies the needs of its customers.

Given a program so complex and so privatized, any decision to make further privatization moves must be supported by evidence of extensive benefit and minimal cost. Such evidence does not exist. In fact, as this report clearly demonstrates, the evidence is that extensive privatization presents substantial costs and risks for the government, for NTIS customers and for the information industry as a whole.

Given the impetus for this study, the governmental costs and risks must be of major interest. These clearly include monetary costs, since discontinuing any significant portion of the NTIS program will increase rather than decrease Federal appropriations. More important, however, are the policy costs and risks, those associated with U.S. competitiveness, national security, technology transfer, intellectual property rights and the availability of scientific and technical information.

Conversely, there is little evidence to show that extensive privatization will provide tangible benefit for NTIS customers or for government's privatization goals. There appears to be some benefit for the information industry, but it is questionable whether this is a net benefit or simply a redistribution of the current benefit level among firms in the industry.

There are some moves, however, that Commerce can make to change the NTIS program in a way which avoids major costs and risks while recognizing the complexity of the operation, contributing to the government's privatization goals, and benefiting both customers and the information industry. These moves include: (a) taking more aggressive steps to establish NTIS/private sector partnerships which will create market opportunities for the information industry; (b) contracting for NTIS advertising and promotion services; and (c) discontinuing an NTIS service which competes with the private sector. All of these moves are included in the Department's NTIS privatization proposal.

TABLE OF CONTENTS

		Page
I.	Introduction	1
II.	Study Process	2
III.	Findings	
	A. NTIS Operations	4
	B. Other Government Information Centers	7
	C. Value of the NTIS Program	8
	D. Goals and Extent of Privatization	8
	E. Risks and Costs	9
	F. Benefits	13
	G. Alternatives	14
IV.	Conclusions	15
V.	Recommendations	18

Appendix A.

1. List of Privatization Task Force Members
2. Federal Register Notice #1: Analysis of Comments
3. Decision Analysis Center Summary
4. Federal Register Notice #2: Agenda; List of Attendees
5. Description and Analysis of Options
6. Calculation of Termination Costs
7. NTIS Private Sector Initiatives
8. Comments of Dr. Harold Seidman
9. History of Privatization at NTIS

Appendix B.

Responses to Federal Register Request for Public Comments

I. Introduction

In its passback on the FY 1987 budget request, the Office of Management and Budget gave the following guidance to the Department of Commerce:

> "DoC is requested to convene an industry/government working group to develop a privatization proposal for NTIS to be included in the 1988 budget. All alternatives should be explored, including selling the operation to the private sector."

In lieu of the industry/government working group, Commerce proposed that the NTIS privatization study be conducted by an intra-Departmental task force (see Appendix A, Part 1 for a list of members) under a process which would include extensive private sector involvement (see Study Process at page 2). This proposal followed from:

- The Department's judgment that the procedural constraints associated with establishment of an industry/government working group under the Federal Advisory Committee Act would delay completion of the study.
- The Department's desire to ensure consideration of the views of all parties interested in the NTIS privatization issue.

This proposal was accepted by OMB, and the Task Force conducted its review during the spring and summer of 1986. This report sets forth the findings, conclusions and recommendations of the Task Force.

The report is organized into five sections. Following this introduction:

Section II describes the process used to conduct this study.

Section III discusses the Task Force's findings.

Section IV presents the Task Force's conclusions.

Section V sets forth the recommended privatization proposal.

A set of appendices follows section V. These appendices, referenced in the body of the report, give important details.

II. STUDY PROCESS

On April 28, the Task Force published a notice and request for public comment in the Federal Register. The notice (see Appendix A, Part 2) included:

- Information on NTIS operations.
- An offer of additional, more detailed information on NTIS operations.
- A request for comment on the privatization issues and alternatives initially identified by the Task Force.
- A request for expressions of interest from those private firms interested in operating all or part of the NTIS system.

The notice elicited 138 responses (see Appendix A, Part 2 for a list of respondents and an analysis of comments; see Appendix B for the actual responses). The period for public comment closed on June 10.

In mid-June, after most of the Federal Register comments were received, the Task Force spent 5½ days in the DoC Decision Analysis Center reviewing the issues and alternatives associated with NTIS privatization. In conducting its review, the Task Force used a computer assisted, hierarchial matrix evaluation structure which allowed for:

- The development of alternatives.
- The development of criteria against which to assess the alternatives.
- The assignment of scores and weights reflecting the importance of the criteria and the extent to which the alternatives satisfied them.

During this process (described more fully in Appendix A, Part 3) the Task Force developed nine some alternatives. These alternatives were derived from members' knowledge of NTIS operations and from the responses to the Federal Register notice.

The Task Force also used its knowledge and the Federal Register comments to develop some 40 criteria divided into five major categories:

- Long term impact on users.
- Long term impact on the information industry.

- Long term impact on government interests.
- Extent to which privatization goals are met.
- Transitional, i.e. short term, concerns.

On June 24, the Task Force announced that it would hold a full day public meeting on NTIS privatization (see Appendix A, Part 4 for the Federal register notice and meeting agenda). The purpose of this meeting was (a) to expose some of ideas derived from the decision analysis process to the public, and (b) to solicit public views on some key, unresolved issues arising from the decision analysis process.

The meeting was held on July 30, in the DoC auditorium with some 100 people in attendance (see Appendix A, Part 4 for a list of attendees). The proceedings included a discussion of the issues/alternatives identified in the decision analysis process, and resulted in the identification of one additional privatization alternative.

During the following weeks, the Task Force drew on its findings from the Federal Register responses, the Decision Analysis Center evaluation, and the public meeting to develop the conclusions and recommendations presented in this report.

III. FINDINGS

In conducting its analysis, the Task Force sought information on six different topics:

A. NTIS operations.

B. Operations at comparable Federal organizations, including the NASA program suggested by OMB as a possible model for privatization at NTIS.

C. The value of the NTIS program and whether the program should be continued.

D. Privatization goals and the extent to which current NTIS operations meet these goals.

E. The costs and risks which the government, NTIS customers and the information industry might incur from privatization.

F. The benefits which the government, NTIS customers and the information industry might achieve from privatization.

G. Privatization alternatives which might be considered.

A. NTIS Operations

NTIS is the central source for the public sale of:

- Scientific, technical and engineering reports describing research done by Federal agencies and their contractors/grantees.
- Similar reports prepared by state and local governments.
- Technical reports prepared by government research organizations in foreign countries.
- Federally generated, machine processable data files and software.

The major activities associated with this clearinghouse operation are:

- Acquisition of reports, files and software.
- Establishment of bibliographic control and preparation of various index and abstract materials.
- Maintenance of an archive.

- Reproduction of reports and tape files.
- Operation of a sales and distribution program.

The NTIS program includes two additional operations:

- NTIS manages the Federal government's most active patent licensing program.
- Because the clearinghouse operation requires specialized staff and equipment resources, NTIS is able to provide services, primarily distribution and customer accounting, to other Federal agencies.

The clearinghouse collection now includes some 1.7 million technical reports and over 2,500 data and software files. Approximately 70,000 new items are added each year. Major sources, representing the work of some 2,000 organizational or individual researchers, are:

Department of Defense	23%
Department of Energy	23%
NASA	4%
Foreign Countries	25%
All Other	25%

Sources are under no obligation to place material in the NTIS system. NTIS operates an aggressive acquisition program leading to interagency and government-to-government agreements for voluntary placement of materials in the system. There are some 270 such agreements currently in force.

NTIS is, for the most part, a secondary distributor:

- Through their own technical information centers, DoD, DoE and NASA supply reports directly to their respective agency personnel and contractors, with NTIS supplying these reports to the general public and business community.
- Many other Federal agencies make primary distribution of their reports through the Superintendent of Documents, with reports placed at NTIS only after the initial GPO offering.

As a result of its secondary distributor position, NTIS has few "best sellers." On average, NTIS sells about 10 copies of each document it acquires.

All documents acquired by NTIS, regardless of source, are placed in the NTIS archive on paper or microform, and are permanently available for sale.

Because they represent the results of research conducted under government sponsorship, few (less than 5 %) of the documents sold by NTIS carry copyright protection.

By statute (15 U.S.C. 1151-1157, as amended) NTIS is a self-supporting agency. With the exception of some $500,000 appropriated for its patent licensing program, all NTIS activities are funded through the sale of its products and services.

Annual NTIS sales revenues of approximately $22 million are derived from:

Full text reports	58%
Bibliographic and announcement products	19%
Software and data tapes	7%
Services to other agencies	14%
Patent licensing fees	2%

Because it conforms to both a public purpose and a requirement to be self-supporting, NTIS operates on what is essentially an overall "break even" basis. Not all individual products, however, recover their costs.

Approximately 75% of the customers NTIS serves directly are small businesses. Other small businesses are served indirectly through the public and university libraries which purchase NTIS products.

The list of regular NTIS customers includes such major firms as IBM (annual NTIS purchases of over $125,000), General Electric and AT&T Bell Labs, along with such academic/research institutions as MIT, Georgia Tech, Harvard Medical School, Stanford University and the University of Texas.

Frequent NTIS customers maintain deposit accounts against which they draw when purchases are made. These accounts total approximately $8 million at any given time, and are held by NTIS in the U.S. Treasury. Monies in these deposit accounts are unfunded liabilities which represent the bulk of NTIS' working capital.

NTIS operates from facilities leased by GSA; purchases its reproduction services from DoC and GPO; and uses DoC owned/leased computer equipment to support its bibliographic, order processing and accounting activities. Other than cash and accounts receivable, the major NTIS book asset is its inventory of printed documents available for sale.

NTIS employs some 330 people; there are an additional 40 on-site DoC Office of Publications personnel who work primarily on NTIS related activities.

B. Other Government Information Centers

The Government has three other scientific and technical information centers somewhat similar to NTIS:

- The Energy Department's Office of Science and Technical Information (OSTI)
- The Defense Technical Information Center (DTIC)
- NASA's Scientific and Technical Information Facility (STIF)

Energy/OSTI

Reports placed in the OSTI system come from internal DoE sources, i.e. labs, and from DoE's contract researchers whose contracts require deposit of their report in the OSTI system. Distribution of reports by OSTI is limited to internal DoE offices and to DoE contractors.

OSTI contracts with a private firm for warehousing, storage, reproduction and distribution of its materials. The contract is a no cost arrangement, with the contractor receiving fees from the sale of microfiche reports to the DoE offices and contractors.

The contractor's costs include only reproduction supplies and personnel salaries. All other parts of the OSTI program (including the original reports, facilities, equipment, utilities, ADP support and postage which OSTI provides for the contractor) are funded by OSTI appropriations. Arguably, the contractor's revenues from sales to DoE offices and contractors might also be considered as funded by appropriations.

Defense/DTIC

Like OSTI, DTIC receives its reports on a mandatory basis from internal and contractor sources. Distribution is limited to "registered users," primarily DoD contractors and offices, on a highly structured, classification-based access system.

DTIC contractor support is limited and is funded by appropriations. DTIC charges users a small fee for each report distributed, but the fee does not cover even distribution costs, much less any other cost of the DTIC program.

NASA/STIF

The STIF receives its reports from NASA research contractors on a mandatory basis, and distribution is limited to internal NASA offices and contractors. Warehousing, storage, reproduction and distribution are provided by a private firm under a contract funded solely by appropriations.

The Task Force notes that, in the case of OSTI and STIF, NTIS helps to finance these operations because NTIS pays these agencies for copies of the reports which NTIS acquires and sells to the general public and business community.

C. Value of the NTIS Program

NTIS and its predecessor organizations have continued to operate for 40 years, through eight different Presidential administrations. The operation has changed, and there have been several reviews of its privatization potential (see Appendix A, Part 9), but there has been no serious attempt to dilute its focused mission.

The President's Private Sector Survey on Cost Control (the Grace Commission) argued that NTIS should be the focus of an even more comprehensive, government R&D information system.

No participant in the privatization study -- customer, source agency or information industry firm -- suggested that the NTIS program should be abandoned.

More than 10,000 customers -- including most of the largest libraries, firms, universities, and research organizations in the country -- are frequent enough users to warrant their establishment of deposit accounts with NTIS.

Virtually all research oriented Federal agencies -- including Defense, Energy, NASA, Veterans Administration, HHS, and Transportation -- use NTIS as a vehicle for providing the general public and business communities with access to their research results.

In reviewing agency budget requests, OMB often uses a "market test" to determine a program's real value. The question is usually asked as "would the user be willing to pay directly for this program?" The NTIS operation is supported almost exclusively by user fees.

D. Goals and Extent of Privatization

At an early stage in its review, the Task Force noted that pursuit of different privatization goals could result in quite different privatization proposals. To clarify the issue, OMB was asked to define its privatization goals. The response was that defining privatization goals in the context of NTIS operations was a responsibility of the Task Force.

NTIS operations are funded almost exclusively from user fees. Except for the $500,000 provided for its patent licensing program, NTIS receives no appropriated funds.

Through its patent licensing royalty revenues and the interest free use of deposit account funds, NTIS returns significant monies -- about $5 million last year -- to the U.S. Treasury.

Employees at NTIS do not represent any drain on the Federal payroll.

The results of four recent A-76 competitions (each "won" by the in-house NTIS staff), the financial turnaround engineered in the last year, and the recent efforts centered on improving customer satisfaction, all suggest that the legislative requirement for self-sufficiency provides NTIS with incentives to operate efficiently and effectively.

Through contracts with NTIS and (primarily) through acquiring, adding value to, and remarketing NTIS products, private firms have derived significant sales and profit opportunities from NTIS operations. In the past year, these opportunities totalled at least $11.7 million, involving some 80 firms. (See Appendix A, Part 7 for details.)

E. Risks and Costs

Government Risks and Costs

Several information industry firms are now controlled by foreign interests. Selling or extensively contracting NTIS to such firms risks foreign control or manipulation of the government's most extensive collection of scientific and technical information. Such control or manipulation, whether benign or otherwise, could be detrimental to U.S. scientific and technical competitiveness. Moreover, even if the sale or contract process could exclude foreign controlled firms from winning or even making a bid, there is no assurance that the winning firm would not subsequently be acquired by foreign interests.

Closely allied to the foreign control issue is the issue of foreign access. As a government agency, NTIS complies with the government's foreign policy decisions to limit some nations' (e.g. USSR and Libya) access to the NTIS information collection. The limiting system is not fool-proof, but it presents these nations with more access difficulty than would be the case under a privatized NTIS system.

While the Task Force does not wish to appear unduly alarmist on the issues of foreign control and foreign access, it notes that these issues were of major concern both to the Task Force members as well as to the Federal agencies who responded to the Federal Register notice.

Government's interest in technology transfer as a means of enhancing U.S. competitiveness is long-standing and, in recent years, increasing. By providing a central collection and access point for much of this technical information, NTIS furthers this governmental interest. Extensive privatization risks this interest since it is likely to result in at least a 50% reduction in the placement of material in the NTIS system. The willingness of some important source agencies to place their material in a privatized NTIS is highly questionable. Another agency, one which provides a good deal of foreign information to U.S. business through NTIS, is prohibited by law from releasing material directly to a private firm. And it is unlikely that foreign countries, which provide information as a result of government-to-government agreements, would continue contributing their materials to a private system. On this final matter, for example, the Task Force notes that the Japan Information Center for Science and Technology was willing to provide U.S. access to its database only through NTIS as a government agency.

Source agencies indicated that the permanent archive and availability features of the NTIS system were important to them. Privatization of the NTIS system risks the loss of these features since it may not be economical, at least at NTIS price levels, for a private firm to continue these features for a collection that sells only about 10 copies per title.

The lack of copyright protection, the risk of diminished source agency input, and the lack of "best sellers" suggest that operating NTIS as a private system, while maintaining its public purpose of the widest possible dissemination of research results, may provide a very limited return on investment. Should this private system fail, the government risks either the abandonment of the NTIS mission or the extensive costs of recreating the NTIS program.

The degree of participation in the Federal Register and public meeting process demonstrates intense interest in the NTIS privatization issue. Government and NTIS customer participants were virtually unanimous in opposing any extensive privatization. The information industry was divided, with beneficiaries of the current system adopting a no-major-change or wait-and-see posture, and non-beneficiaries suggesting extensive privatization. This situation suggests that any privatization decision risks opposition from some party, with the risk of opposition to extensive privatization being somewhat greater.

Any privatization action which results in establishing a single private firm as the access to the NTIS system risks the government's interest, expressed in OMB Circular A-130, in preventing monopoly control of Federal information dissemination.

Any extensive privatizaton moves would result in net costs to the government. Depending upon the alternative chosen, these costs would include: up to $21 million for employee termination and settlement of deposit account and other liabilities; approximately $700,000 for the loss of interest free use of deposit account monies; and $7 million in NTIS service/use payments to Commerce and other agencies. Any source agency decision to operate its own distribution system in lieu of the private successor to NTIS would add to these estimates. These costs would not be fully offset by the proceeds from any privatization sale because (a) there are no fixed or property assets; (b) the book value of NTIS is limited to approximately $14 million in cash, receivables and inventory; and (c) the lack of copyright precludes NTIS from offering the buyer any exclusive right to own, reproduce or sell the material in the NTIS system.

Customer Risks and Cost

In their Federal Register responses and in the public meeting, customers identified some privatization costs and risks that were the same as those described above for the Government. Customers were particularly concerned that a privatized NTIS system: (1) would not maintain the archive feature which assured the availability of old and low-volume-selling reports; (2) would result in a substantial cut in the number and quality of documents entering the system; (3) might sacrifice public purpose goals for profitability; (4) would create potential for establishing monopoly control; or (5) might become a business failure which the government would choose not to remedy. Customers were also very much concerned about two other risks which extensive privatization might entail:

- The current NTIS system provides customers with reasonably efficient, central indexing for, and one stop access to, the bulk of the government's research results. Any privatization proposal which dismembers the system by function, product and/or subject area would eliminate these features, forcing customers to spend additional time and effort going to several outlets or to the individual source agencies. The Task Force notes that it would be difficult to overstate the user community insistence that central indexing and one stop access be retained.

- Many customers, particularly public and university libraries serving a local business and research community, noted (1) that the government had an obligation to provide information on the results of tax supported research at the lowest price that would recover costs; (2) that libraries had for some time been under considerable financial pressure from rising costs and steady or falling revenues; and (3) that, as discussed above, a privatized NTIS may have some difficulty making money. These customers were concerned that privatization would risk substantially higher prices which would, in effect, limit the access which they and their clients have to the system. From a governmental perspective, this pricing risk, if actualized, would mean reducing system access for many of the small, research oriented or high tech firms that benefit most from the transfer of government technology.

Information Industry Costs and Risks

As discussed previously, the Task Force was concerned that, given the constraints associated with diminished input, lack of copyright protection and limited per title sales, a privatized NTIS may have some difficulty in making an acceptable return on investment. The private sector apparently agrees with this assessment: no firm came forward with, or showed any interest in, an offer to buy the NTIS operation. Rather, the industry proposals included:

- Acting as a contractor to operate the entire NTIS program.
- Acting as contractor or agent for the retail distribution of NTIS products.
- Acting as producer and seller of those NTIS materials identified as "value added" products.

The scope of these proposals limits the risks privatization poses for the industry:

- A contractor risks some financial loss if it is "beaten out" in any subsequent recompetition of the initial contract.
- Lack of copyright precludes NTIS from offering exclusive rights to reproduce and sell products. With several firms in the market as sales agents, each firm risks an unprofitable operation.
- If one private contractor operates the entire NTIS program, or its sales and distribution elements, it could, through product, operating or pricing strategies limit the access and profit opportunities of other firms. This becomes a risk for those firms, both current and prospective, who can use NTIS materials to create profit opportunities. From a governmental perspective, the irony (and the risk) is that privatization may reduce rather than increase private sector opportunities.
- Privatization risks a zero sum game in which private firms currently profiting from their relationship with NTIS are simply replaced by other firms. This risk applies only to those firms that benefit, or see the potential for benefit, from the current situation.

In addition to the costs and risks incurred separately by each of the three major parties interested in NTIS privatization, these parties collectively will incur short term costs and risks due to the operational disruption associated with any extensive change in the current system.

F. Benefits

Government Benefits

The Task Force could identify few operational or mission benefits which government might achieve from privatization. It is possible that the operational and financial flexibility available to a private firm may place a private system in a better position to make use of emerging information technologies. But such benefits are speculative, at best, and the evidence, e.g. NTIS' agreement for Digital Equipment Corporation to sell the NTIS database on CD/ROM, suggests that similar benefits can be achieved in the current system.

The governmental benefits from privatization appear limited to areas associated directly with privatization goals:

- Depending on the alternative chosen, privatization would reduce the number of Federal government employees by a maximum of about 360 people. The Task Force notes that there would not be a comparable reduction in Federal payroll costs since salaries for NTIS employees are paid from user fees rather than appropriations
- A reduction in the number of Federal employees would reduce the government's pension liabilities and payout. The Office of Personnel Management suggests, however, that this reduction would be unnoticeable and would likely be cancelled out by employee withdrawals of prior retirement contributions.
- The government would be out of a business which competes with the private sector. The Task Force notes, however, that when industry representatives were asked to identify those areas where NTIS competition was most determental to their interests, the representatives identified NTIS' custom search service and its Published Search products. Annual NTIS revenues from custom searching total about $20,000. Published Searches are produced and distributed for NTIS by a private sector contractor who earns over $400,000 from this activity. In addition, NTIS pays about $160,000 in fees to the private sector owners of the databases referenced in the Published Searches.

Customers Benefits

The Task Force's review of NTIS operations suggests that privatization *per se* will not necessarily result in better or more efficient service to NTIS customers. Comments from the information industry, however, suggest that privatization would lead to the development of more "value added" products than are currently available. The industry stated that these products have not been developed to date because private firms fear that, should a profitable market for such products emerge, NTIS would step in with a similar, lower priced products and take over the market.

Information Industry Benefits

To the extent that NTIS vacates the market or that profits can be made from serving as contractor to, sales agent for, or overall manager of, a privatized NTIS system, privatization will confer financial benefits on the industry, or at least on those firms able to (a) win a sales/contract bid, or (b) develop some subsequent arrangement with such a winner.

The degree of benefit depends primarily on the nature of the privatization action. At one extreme, a privatization proposal to contract for operation of a small part of the NTIS system will confer relatively little benefit. At the other extreme, a privatization proposal made at the public meeting by the Information Industry Association calls for NTIS' acquisition, bibliographic control and archiving operations to be funded by appropriations, with NTIS distributing its products at a price sufficient to cover only reproduction costs. Private firms would use the NTIS materials and information to produce and sell the industry's products and services. Privatization action of this kind would confer a relatively larger benefit on the industry.

G. Alternatives

During the course of its review, the Task Force identified, or was presented with, ten basic alternatives for the privatization of NTIS:

Merge NTIS with the Government Printing Office.

Status quo.

Sell entire NTIS operation to the highest private sector bidder.

Contract out entire NTIS operation.

Partially divest; fund acquisition, bibliographic control and archive functions with fee paid by retail sale contractor or licensee.

Establish NTIS as a government corporation.

Expand NTIS operations to include electronic dissemination and subject areas beyond science and technology.

Establish NTIS as the National Technology Library (comparable to the National Library of Medicine, the Library of Congress or the National Agricultural Library) and include it in a five part National Technology Center.

Terminate the program, allowing the private sector to assume whatever functions it chooses.

Use appropriations to fund acquisition, bibliographic control and archive functions; private sector to operate retail market as it chooses.

IV. Conclusions

Based on the findings discussed in Section III, the Task Force developed the following conclusions:

A. The NTIS operation is a highly complex system involving significant internal and external interdependencies. Any privatization move which might disrupt this system should be approached with great care.

B. Because they are funded largely by appropriations, receive their reports on a mandated basis, and distribute documents only to internal and contractor personnel, none of the three technical information centers operated by other agencies provide a relevant model for the privatization of NTIS.

C. NTIS provides substantial value to the government, to NTIS customers, and to the information industry. The program, whether under government or private sector management, should be continued.

D. By almost any definition of privatization goals -- lower government appropriations, expanded user fees, greater efficiency, lower employee salary costs, or expanded private sector opportunities, -- NTIS is already a substantially privatized operation.

E. Any extensive move toward further privatization of NTIS creates significant risks and costs for government, for NTIS customers and for the information industry.

For government, the risks and costs include:

Foreign control of the NTIS information system.

Easier access to the NTIS system by proscribed nations.

Loss of the NTIS archive.

Opposition from those who don't like the decision.

Potential monopoly control.

Appropriation costs for shutting down all or part of the NTIS operation.

Loss of at least 50% of NTIS' annual report input.

Abandonment of mission or costs to recreate the system if a privatized operation fails.

NTIS customers incur the same costs and risks associated with the archive, the availability of old or low demand reports, monopoly, reduced document input and failure of a private system. In addition, customers risk:

Loss of a central index for, and one stop access to, the NTIS information base.

Higher prices which could reduce access for many small businesses.

Risks and costs for the information industry include:

Financial loss for a contractor failing to win a recompeted contract.

Unprofitable operation as a producer/seller.

Limited market opportunities.

Zero sum replacement of firms benefitting from the current system by new firms benefitting from a privatized system.

F. Except for those benefits which might accrue to a few information industry firms, the benefits of privatization are few and of doubtful value:

o Tangible government benefits would be minimal: government competition with the private sector would marginally decrease, and the number of, but not the costs for, Federal employees would be reduced.

o NTIS customers might benefit from the new, value added products which the information industry might develop, although the Task Force finds that the industry's rationale for not having developed such products in the past to be questionable.

o The information industry would benefit financially from a diminished NTIS market presence, but much of this benefit may be merely a redistribution of current system benefits to new firms winning sale or contract bids. The size of overall benefit would depend on the privatization alternative chosen.

G. The Task Force is unwilling to accept any of the ten privatization alternatives as the basis for an NTIS privatization proposal (see Appendix A, Part 5 for more detailed analysis):

o Two of the alternatives -- merger with GPO and the status quo -- were rejected because they make no progress toward any privatization goal, while the Task Force finds that further progress is both possible and desirable. In addition, the GPO merger alternative was seen as an attempt to force fit two organizations which are institutionally, philosophically and operationally incompatible.

- Three of the alternatives -- sale, contract and partial divestiture -- were rejected because the Task Force was unwilling to accept their meager benefits, available primarily to a limited number of information industry firms, in exchange for the substantial risks and costs these alternatives would impose on government, NTIS customers and the information industry as a whole.
- One alternative -- establishing a government corporation -- was seen as having potential for greater operational flexibility which might lead to improvements in the NTIS program, but it was rejected as not being a true privatization alternative.
- Two alternatives -- expansion and the National Technology Library -- were rejected because they failed to address the privatization issue and because their scale and technical complexity were beyond the scope of the Task Force.
- One alternative -- terminating the program -- was rejected because it meant the complete abrogation of government's interest and role in fostering competitiveness by providing its research results to business.
- One alternative -- appropriation funding -- was rejected because in addition to the costs and risks it would impose on government and NTIS customers, the Task Force was unwilling to recommend any action requiring continued appropriations to fund a program now funded exclusively by user fees.

As the Task Force neared completion of its study, it became aware of several proposals suggesting that government activities might be spun off, as a contract or sale, to firms in which the Federal employees that previously performed the activities have substantial ownership. Without giving extensive analysis to these proposals, the Task Force notes that legislation authorizing such arrangements has not yet passed. More importantly, the Task Force notes that prior Federal employment provides neither the government nor NTIS customers with any protection from the significant costs and risks identified earlier as being associated with any other contract or sale alternative for privatizing NTIS.

V. Recommendations

Having rejected all of the extensive privatization alternatives, the Task Force sought to review each of them again in order to identify those elements which, if combined into a single proposal, might: (a) make further progress toward privatization goals; (b) provide benefit for the government, NTIS customers and the information industry; and (c) minimize the costs and risks. As a result of this review, the Task Force was able to develop a recommended proposal incorporating the following elements:

1. NTIS should more aggressively seek to establish partnerships and joint ventures with information industry firms. Such arrangements would allow these firms to use NTIS materials to develop products and services that will (a) create market opportunities for the industry, and (b) provide more value for both NTIS and industry customers. A major part of this effort should focus on areas where NTIS materials and government information systems knowledge can be combined with private sector technology and financial support to develop products and services that make the benefits of information technology advances more available to users of government scientific and technical information.

   The Task Force notes that NTIS has already made some moves toward such partnerships, including making its database available (a) online through Dialog and similar private vendors, and (b) on CD/ROM through the Digital Equipment Corporation. Nonethless, the Task Force does not believe that, to date, such moves have been as aggressive as they can be or as the times demand them to be.

   The Task Force also notes that, as a result of some discussion along these lines at the public meeting, two information industry firms have already come forward to explore partnership possibilities with NTIS. Though both firms were cautioned that neither Commerce nor OMB had seen the Task Force report, they were still sufficiently interested to make arrangements for members of their staff to spend several weeks at NTIS reviewing its materials and systems.

2. As part of this more aggressive partnership approach, NTIS should:

   o Make information on its materials and on its interest in partnership arrangements more clearly known to firms in the information and information technology industries.

- Name a senior level information professional, responsible to the NTIS Director, who would be charged with maintaining active NTIS involvement with the private sector. This individual would ensure that private firms approaching NTIS are able to have access to appropriate NTIS managers and staff to obtain information, present proposals, obtain feedback and get cooperation in developing innovative products and services.

- Meet with the private sector to establish an NTIS industry associates program similar to that operating at the National Bureau of Standards. A program of this kind would provide the private sponsor with the opportunity to have members of its staff work closely with NTIS information professionals for a specified period, on a full-time basis, to develop tools, services, or products that can be marketed to the scientific and technical information user community. Both NTIS and the sponsoring organization would benefit from the program. By getting exposure to the full spectrum of NTIS information processes, products, and services, the Industry Associate would obtain an understanding of how current products and services are provided, and would have the opportunity to communicate industry views, expectations, and needs directly to NTIS management. NTIS would obtain the temporary services of several high-level specialists at no cost to the Government, while encouraging and facilitating private sector participation in the dissemination of government scientific and technical information.

- Offer specific NTIS products directly to private sector firms. By providing private firms with magnetic tape or microfiche for such products as Title Index, Corporate Author Authority File, and Standard Technical Report Number, NTIS could create opportunities for the private sector to add value to and market these publications to the public.

- Consult with OMB and other Federal agencies on the need for and feasibility of designating NTIS as a coordinating agency for government-wide scientific and technical information under OMB Circular A-130. As the legislatively authorized clearinghouse for government scientific and technical information, NTIS can play a key role in implementing the Circular and, particularly, in meshing its provisions with the interests of the information consumer and the information industry. Since the government produces an ever-increasing amount of technical information in electronic form, source agencies, users, and information marketers would all be well served by an NTIS which knows the information system and which has active partnerships with the private sector to exploit the benefits of these electronic technologies. NTIS would be in the best position (a) to assist agencies in planning new information programs and (b) to incorporate new technologies, information industry market opportunities and user needs into these plans.

- Make a comprehensive review of the costs and benefits of forming a government corporation. NTIS meets the generally accepted criteria for a government corporation (see Appendix A, Part 8), and the concept presents an interesting and relatively novel way of providing NTIS with the flexibility which (a) might lead to further program improvements, and (b) might be necessary to facilitate a more aggressive move into partnerships and joint ventures with the private sector.

3. NTIS should contract out its advertising and promotion activity. The Task Force took particular note of the complexities and interdependencies of NTIS operations, and concluded that piecemeal contracting of its activities risks serious disruption of these operations for no apparent benefit. The advertising and promotion activity, however, represents perhaps the only discrete and separable element. Moreover, given the nature of these activities, the skills and talents to perform them are more likely to be found in greater abundance in the private sector. If possible, the contract should be an incentive arrangement, rewarding the contractor on the basis of volume sales attributable to contractor performance. The total annual cost of this NTIS activity is $1.3 million, including salaries for some 10 employees. Through attrition, training and internal placement, NTIS should be able to avoid any close out costs associated with this recommendation.

4. NTIS should discontinue custom searching of its database. As noted by the information industry, this activity competes directly with identical services offered by private information brokers, many of them small businesses. NTIS should assist these businesses by compiling a list of such brokers and providing the list to customers seeking custom search services from NTIS.

These recommendations will further privatize NTIS operations and will benefit NTIS customers and the information industry without incurring the costs and risks associated with all of the other alternatives reviewed by the Task Force.

APPENDIX 1

List of Privatization Task Force Members

PRIVATIZATION TASK FORCE

Joseph E. Clark	National Technical Information Service
Thomas J. Cox, Jr.	National Technical Information Service
Michael R. Rubin	Office of the General Counsel
D. Bruce Merrifield	Assistant Secretary for Productivity, Technology and Innovation
Jack C. Williams	Office of Productivity, Technology and Innovation
Michael Sawyer	Office of the Under Secretary for Economic Affairs
David Farber	Office of the Assistant Secretary for Administration
James Sullivan	Office of the Assistant Secretary for Administration
Charles F. Treat	Office of the Assistant Secretary for Administration
Elaine McNamara	Office of the Assistant Secretary for Administration
Carol Ballew	Office of Management and Budget

Appendix 2

Federal Register Notice #1

Analysis of Comments

List of Respondents

federal register

Monday
April 28, 1986

Part III

Department of Commerce

Productivity, Technology, and Innovation; Study of Alternatives for Privatizing the National Technical Information Service; Notice and Request for Public Comment

DEPARTMENT OF COMMERCE

[Docket No. 60352-6052]

Productivity, Technology, and Innovation; Study of Alternatives for Privatizing the National Technical Information Service

AGENCY: National Technical Information Service. Commerce.

ACTION: Notice and request for public comment.

SUMMARY: The Department of Commerce is conducting a study of alternatives for privatizing the National Technical Information Service (NTIS). Various alternatives are being considered under which all or part of the National Technical Information Service would be operated by the private sector. This notice requests information and comments from all interested parties on those alternatives and on some associated policy issues. The Department of Commerce will draw on the information and comments in developing its recommendations and in proposing any legislation which might be required.

A change in the basic structure or operation of NTIS could affect several classes of persons and organizations. Comments are particularly, but not exclusively, invited from these classes, including: Customers for whom NTIS products and services provide access to U.S. and foreign government scientific and technical information: source organizations for which NTIS serves as a vehicle for the dissemination of research results: private sector organizations that derive revenue from products or services sold to, through or in conjunction with NTIS: private sector organizations interested in operating all or part of NTIS: and any other persons or organizations whose activities have been affected by current NTIS operations or might be affected by a change in those operations.

DATE: Comments must be received on or before May 28, 1986.

ADDRESS: Comments may be sent to the Assistant Secretary for Productivity, Technology and Innovation c/o Joseph Clark, Room 4824, U.S. Department of Commerce, Washington, DC 20230.

FOR FURTHER INFORMATION CONTACT: Joseph Clark, Deputy Director, NTIS (703) 487-4612.

This notice is divided into three parts: (1) A description of the operations of the National Technical Information Service: (2) a listing of privatization alternatives: and (3) a listing of issues.

Description of the National Technical Information Service

The National Technical Information Service (NTIS) operates under the authority of Title 15 U.S.C. 1151-1157, as amended, which authorizes the Secretary of Commerce to establish a clearinghouse for the collection and dissemination of scientific, technical and engineering information. Operating under this authority, the NTIS operation has evolved to include the following elements:

- Acquisition and dissemination of reports describing the results of research done primarily by Federal agencies, their contractors and grantees, but also including similar reports from state and local governments, colleges and universities, and professional associations.
- Acquisition (limited), translation and dissemination of foreign technical information.
- Acquisition and distribution of Federally-produced computer programs and computerized data bases.
- Operation of the Federal Research in Progress (FEDRIP) program which, as successor to the Smithsonian Scientific Information Exchange, provides information describing on-going Federally-funded research projects in the physical, engineering and life sciences.
- Operation of the Center for the Utilization of Federal Technology as called for in the Stevenson-Wydler Technology Innovation Act (Pub. L. 96-480).
- Assistance to state and local governments in furthering their technology transfer programs.
- Acquisition and licensing of government-owned patents with significant commercial potential.
- Provision of accounting and production services to Federal agencies, and technical assistance for the Agency for International Development's efforts to transfer U.S. scientific and technical information to developing countries.

The first four elements make up the clearinghouse program, the largest part of the NTIS operation. Through agreements with Federal agencies or with foreign firms and governments, NTIS acquires the reports, software programs and data bases: prepares bibliographies which describe and announce their availability: and sells the reports, programs, data bases and bibliographic materials.

Complete text reports are sold on an ad hoc or subscription basis, and are available in paper or microform. Software and data base tapes are sold on an ad hoc basis. Bibliographic material is sold as: A biweekly and an annual index to all reports: a weekly newsletter covering reports in each of 26 subject categories: an on-line data base: and ad hoc published and on-line searches.

The NTIS collection includes over 1.6 million titles. Because NTIS provides archival storage for reports entering its system, all are permanently available for sale, either as shelf stock or as a print from paper or microform master.

There is no legal or regulatory requirement for Federal agencies to place their reports in the NTIS system. In many cases, NTIS serves as a secondary distributor. Because of its secondary distribution role, and because of the highly technical nature of its reports, the current NTIS audience is limited: on average, NTIS sells less than 10 copies of each report it acquires.

Approximately 2,000 sources, both U.S. and foreign, place reports in the NTIS system. For FY 1985, the major sources were the Department of Defense (approximately 23% of all titles acquired), the National Aeronautics and Space Administration (4%), the Department of Energy (23%), foreign sources (25%, more than half of which enters NTIS through arrangements with DoE and NASA); and all other (25%).

Customers can purchase NTIS products on an ad hoc or annual subscription basis. Methods of payment include check, money order, credit card or invoice billing. Most regular customers establish deposit accounts at NTIS, drawing down on these accounts as necessary to purchase specific products. Major exceptions to these arrangements are: The services provided to other agencies (handled as reimbursables); patent licensing (partially funded by appropriations); and the bibliographic data bases (leased directly to major users, and leased to commercial vendors for third party, i.e., public, use).

Many regular customers purchase one or more bibliographic products and use these products to identify specific reports they need. Infrequent or one-time customers typically learn of the availability of a report through announcements in trade press or through customer-initiated contact with NTIS sales personnel.

Over the past 18 months, NTIS has sold its products to some 40,000 individuals, firms, schools, libraries and governments, both foreign and domestic. Approximately 75% of NTIS customers are small businesses. In the past year, NTIS has shipped over 4.5 million documents and microforms, an average of 18,000 each day. Approximately 15% of NTIS sales are to foreign customers.

NTIS operations are located in Springfield, Virginia, in the Washington, D.C. metropolitan area. Customer orders come in by mail, phone, (limited) in person sale, and on-line. With the exception of limited pick-up orders from local customers, all document orders are shipped via United States Postal Service, United Parcel Service or similar carriers. Most foreign sales are handled through independent, in-country dealers who take orders from and make local distribution of products to final customers.

Marketing to NTIS customers is done primarily through direct mail, supplemented in small part by exhibits at appropriate conventions/meetings and by alerting the trade press to the availability of specific reports. Liaison with source agencies, encouraging them to place documents in the NTIS system, is done primarily through direct personal contact.

As of March 14, 1986 the NTIS staff numbered 333 employees:

Executive and policy direction	8
International affairs, including foreign acquisition and AID support	11
Product management, domestic acquisition and source agency liaison	26
Marketing, sales and customer service	43
Center for the Utilization of Federal Technology, state/local government assistance and patent licensing	13
Order processing, inventory control, warehousing and order fulfillment	88
Document (input) processing, bibliographic activities and preparation (excluding printing) of publications	54
Budget, customer accounting, financial management, administrative services and computer programming	90
Total	333

Printing and microform reproduction services are provided by a non-NTIS Department of Commerce publications unit, by the Government Printing Office and by GPO contractors. Billings to NTIS for these services in FY 1985 were $4.5 million. Personnel services and computer hardware services are provided by the Department of Commerce, with FY 1985 billings of $275,000 and $1.2 million respectively.

Except for some $500,000 in budgetary appropriations for the patent licensing program, NTIS activities are funded from revenues earned from the sale of products and services. In FY 1985, earned revenues were $21.3 million. Approximately 58% of this amount was from the sale of full text reports; 19% from bibliographic and announcement products; 14% from services provided to other agencies; 7% from software and data tapes; and 2% from patent licensing fees.

Interested parties may call or write to the Deputy Director of the National Technical Information Service, at the address or telephone number shown above, for a package of materials which provides detailed information about the agency's activities, costs, sales volume, products, and source agencies.

Privatization Alternatives

The Department of Commerce has tentatively identified a number of alternatives for privatizing NTIS operations, some of which would require legislation:

- Discontinuing NTIS operations and allowing the private sector to pursue whatever opportunities that discontinuation offers;
- Selling the entire NTIS operation to one or more private organizations;
- Selling portions of NTIS, e.g., marketing and order fulfillment, while retaining the rest as a government activity;
- Contracting with a private organization for the conduct of all or portions of the NTIS activity; or
- Establishing NTIS as a government corporation, nonprofit corporation or some other form of public or private special-purpose organization.

Interested parties are invited to discuss their views as to the advantages and disadvantages of these alternatives.

They are also invited to identify and discuss other alternatives for privatization of NTIS.

Privatization Issues

The Department of Commerce has identified a number of key issues which must be addressed in the course of evaluating these and other privatization alternatives. These issues are described below, and public comment is invited on them.

1. Federal agencies are under no obligation to place their reports in the NTIS system. This raises several issues: (a) If the Department of Commerce could not assure that Federal source agencies would continue to place their reports in a privatized system, would any private organization be willing to undertake the operation of the present NTIS? (b) If not, should any legislative change incident to the privatization of NTIS include a requirement that agencies place their reports in the system? and (c) In the absence of any such requirement, what incentives could a private organization offer to ensure that current agencies would continue to place their reports in a private system?

2. Most NTIS agreements for the acquisition of foreign technical information are developed on a government-to-government basis providing for mutual exchange. How might these arrangements be continued in a private system?

3. Resolution of issues 1 and 2 might involve an arrangement in which the acquisition of source agency reports remained a governmental activity, with all costs reimbursed by the private sector, but all other NTIS functions are performed by a private organization. Under such an arrangement, what influence would the private organization expect to have to ensure that the government operated acquisition activity is responsive to the private organization's business objectives?

4. NTIS ensures the permanent availability of all documents entering its system. Many of these documents sell in very limited numbers, literally in the single digits. Would a private organization operating the NTIS system be willing to continue this policy of permanent availability? Should it be required to do so?

5. Generally, Federal reports entering the NTIS system cannot be copyrighted. Should legislation conferring copyright protection be included in the privatization proposal?

6. NTIS source agencies often make a primary distribution before placing a report in the NTIS system. Would continuation of this practice have a substantial adverse impact on a privatized NTIS system, or render that system uneconomic?

7. If the NTIS operation was sold to the private sector, should it be sold on an exclusive basis to only a single organization, or on a non-exclusive basis to several organizations? Should the government exercise come control over prices charged for products? How?

8. The NTIS system has served as a one-stop source for the sale of much of the Federal government's scientific and technical information. If the system was sold to several private organizations, this one-stop feature of sufficient value to warrant some special arrangement to ensure its continuation? What form might this special arrangement take?

9. To what extent, if any, and in what specific ways has the existence of NTIS affected private organizations in the information industry? How has this, in turn, affected the dissemination of Federal scientific and technical information? How might these effects change as a result of privatizing the NTIS system?

10. Privatizing NTIS raises a number of other issues dealing with:

- The effect of such proposed action on matters of broad national interest, i.e., national defense, U.S. scientific and technological competitiveness, and the national economy;

- The rights of U.S. citizens to have access to the results of Federally-funded research and development; and
- The interests of the U.S. information industry, especially those firms that might wish to participate in those activities resulting from the privatization of NTIS.

Interested parties are invited to identify and discuss these and any other specific issues that should be considered in the course of evaluating alternatives for the privatization of NTIS.

Expressions of Interest

Organizations that might be interested in operating all or part of NTIS are invited to make their interest known, and to describe the terms and conditions under which they would be interested. This is an informal request for such expressions of interest. A final decision on the nature and extent of privatization for NTIS operations will be followed, if appropriate, by a formal request for proposals and/or bids.

Procedures

Requests for additional information, and comments, should be directed to Joseph Clark at the address or telephone number shown above.

Dated: April 24, 1986.

D. Bruce Merrifield,

Assistant Secretary for Productivity, Technology, and Innovation.

[FR Doc. 86-9545 Filed 4-25-86; 8:45 am]

BILLING CODE 3510-04-M

ANALYSIS OF COMMENTS
TO
FEDERAL REGISTER NOTICE

STUDY OF ALTERNATIVES
FOR PRIVATIZING THE
NATIONAL TECHNICAL INFORMATION
SERVICE

INTRODUCTION

On April 28, 1986 the National Technical Information Service (NTIS) published a notice in the Federal Register (Appendix A) announcing that the Department of Commerce was conducting a study of alternatives for privatizing NTIS, and requesting interested parties to submit comments about various issues of concern to them. This document presents an analysis of the responses to the Federal Register notice.

NTIS received 138 responses, of which 15 came from government agencies and Congress, 10 came from information industry firms, and the remaining 115 came from individuals or organizations that used the service. The user community, which consisted largely of national, state, and local library associations, university libraries, public libraries, and technical libraries associated with private corporations, provided NTIS with extensive information and comments, most of which favored maintaining the status quo. Similarly, government agencies and Congress saw many problems associated with privatization and opposed any action that would remove NTIS from government control. The information industry, on the other hand, felt that the private sector could play a significant role in disseminating the Government's scientific and technical information. This analysis describes the reactions of each of these groups to the major issues articulated in the Federal Register notice.

NTIS used a computer-supported process to analyze the response. Senior staff members read each letter and characterized the respondent in terms of his/her constituency, i.e., Federal Government, user, or information industry. Next, portions of the letter were highlighted and assigned keywords that corresponded to the issues enumerated in the Federal Register notice. This information was stored in an automated database, which was then used to retrieve all comments about an issue by constituency. Direct quotes that reflected the majority of comments were used in the report whenever possible to capsulize the opinions and concerns of the respondents.

The report is organized as follows. Each section begins with the issue described in the Federal Register notice, followed by a summary of the comments of the Government, the users, and the information industry.

The number of comments included in the summary is also shown. Two appendices have been provided. Appendix A contains the text of the Federal Register notice. Appendix B contains a list, by constituency, of organizations that responded to the Federal Register notice.

ANALYSIS OF FEDERAL REGISTER RESPONSES

ISSUE 1:

Federal agencies are under no obligation to place their reports in the NTIS system. This raises several issues: (a) If the Department of Commerce could not assure that Federal source agencies would continue to place their reports in a privatized system, would any private organization be willing to undertake the operation of the present NTIS? (b) If not, should any legislative change incident to the privatization of NTIS include a requirement that agencies place their reports in the system? and (c) In the absence of any such requirement, what incentives could a private organization offer to ensure that agencies currently doing so would continue to place their reports in a private system?

A. Government (6 comments)

Government agencies and Congress expressed their concern that agencies would be reluctant to participate in a privatized NTIS. Because of the sensitivity of technology transfer to economic and military considerations, a privatized NTIS would likely receive fewer documents from agencies than at present. Furthermore, government agencies were opposed to legislation that would force them to provide their scientific and technical material to the private sector, citing mission and legislative requirements. Agencies were also concerned about the potential loss of the NTIS archive, as well as the propriety of placing their reports with a private organization seeking to maximize its profit.

B. Users (30 comments)

Users' concerns centered around the question of availability of documents, feeling that government agencies might not want to deal with a private sector firm, thus eventually limiting the number of documents that were disseminated. They also felt that a private firm would experience great difficulty in acquiring foreign technology.

The question of mandatory submission of documents elicited two kinds of responses. Some users felt that legislation requiring agencies to deposit documents should be enacted whether or not NTIS were privatized because the current system of voluntary cooperation results in significant gaps in service levels. Other users, who noted that large numbers of documents flow into NTIS under the present voluntary situation, felt that any legislation to compel agencies to place their reports with a privatized NTIS would be met with great opposition and viewed as another example of over-regulation by the Federal Government.

Users also opposed a legislated mandate to place government reports in a privatized sales clearinghouse on the grounds that it relinquishes government responsibility to make the results of technological R&D more readily accessible, raises questions of inappropriate proprietary influence over the flow of this information, and ignores the impact such as arrangement would have on sale programs of other Federal agencies.

C. Information Industry (4 comments)

Information industries respondents though that Federal managers would be so reluctant to place scientific and technical information in the hands of the private sector that they would institute information dissemination services in their agencies. Because of this, some form of clearly stated policy that would require agencies to make documents available to a privatized system would be necessary. Otherwise, a private operator would be faced with great uncertainty as to the number and volume of documents to be handled and the resources necessary to operate the system. The private organization could encourage agencies to cooperate simply by paying a fee and/or royalty for each document. A major re-marketer of the NTIS database felt that the transfer of NTIS' function to the private sector could result in little or no control of the collection and/or dissemination of NTIS' data in the public interest.

D. Analysis

Government agencies would be reluctant to place their reports in a privatized NTIS, and would oppose legislation that mandated their participation. Users agreed that agencies would not cooperate with a private firm to the same degree as with NTIS. Some felt that legislation mandating participation should be enacted whether or not NTIS were privatized, while others disagreed strongly with any move to require agencies to provide their reports to the private sector which would then sell them for a profit. The information industry also thought the flow of documents to a private sector firm would diminish to a great extent without legislation, but believed that the private organization might encourage participation by paying a fee or royalty to the agency for each document.

ISSUE 2:

Most NTIS agreements for the acquisition of foreign technical information are developed on a government-to-government basis providing for mutual exchange. How might these arrangements be contained in a private system?

A. Government (3 comments)

Both Federal agencies and Congress found it unlikely that foreign governments would be willing to deal as directly and effectively with private sector organizations as they have with the U.S. Federal Government since the private sector cannot offer the types of material in exchange which most foreign governments would seek. Moreover, private organizations would be unable or unwilling to limit sales based on U.S. foreign policy requirements.

B. Users (14 comments)

Users felt that the United States must continue to acquire foreign technical information to compete economically in a shrinking global market. Any arrangement that jeopardized the government-to-government exchange of this information would not be acceptable to either government agencies or to the private sector. In addition, foreign governments would lose the assurance that their information would be widely disseminated and would restructure their participation accordingly. Developing nations, who have begun to use the NTIS system as a model for international exchange of information between ~~governments,~~ would also be adversely affected.

C. Information Industry (1 response)

A major re-marketer of the NTIS database doubted that foreign governments would cooperate with private industry to the extent that such cooperation currently exists. To the contrary, privatization of NTIS' essential functions could trigger a disincentive to inter-government data exchange, resulting in barriers to public access.

D. Analysis

All respondents agreed that international exchange of information would suffer if NTIS were privatized.

ISSUE 3:

Resolution of issues 1 and 2 might involve an arrangement in which the acquisition of source agency reports remained a governmental activity, with all costs reimbursed by the private sector, but all other NTIS functions would be performed by a private organization. Under such an arrangement, what influence would the private organization expect to have to ensure that the government-operated acquisition activity be responsive to the private organization's business objectives?

A. Government (3 comments)

Government agencies felt that, because government agencies are seeking to be responsive to their public constituency, it is difficult and unrealistic to visualize them in harmony with a private organization seeking to maximize its profits.

B. Users (11 comments)

Users feared that much valuable information would never become accessible as agencies may not want to share materials with a private company. Furthermore, some respondents (2 responses) expressed the view that the public would have no assurance that a privatized NTIS would continue to operate.

C. Information Industry (1 comment)

A major re-marketer lauded the current model in which private industry in a competitive environment is able to acquire the NTIS database and add value to serve the special needs of the information consumer. The entry of a privatized NTIS into competition versus cooperation with private industry would likely have a serious and chilling effort on future investments by private industry.

D. Analysis

Although relatively few respondents were concerned with this issue, they agreed that a potential conflict existed.

Issue 4:

NTIS ensures the permanent availability of all documents entering its system. Many of these documents sell in very limited numbers, literally in the single digits. Would a private organization operating the NTIS system be willing to continue this policy of permanent availability? Should it be required to do so?

A. Government (9 comments)

Many government agencies rely on NTIS for the public availability and continuing access to low-demand and older material. In fact, the existence of the archive is often one of the major inducements for depositing material with NTIS. Because this function is critically important, any privatized NTIS should be required to keep such materials permanently available. Congress felt that it would be naive to assume that, pro bono publico, any profit seeking organization would attempt to guarantee the continuation of the NTIS archive when such an activity would undoubtedly be costly.

B. Users (77 comments)

The NTIS archive aroused considerable comment from users, especially libraries and research institutions, who felt that permanent availability of little-asked-for items was the greatest asset of NTIS and should not be eliminated. Because one cannot predict when new developments will benefit from review of work done long before, permanent availability of technical documents saves millions of dollars that might otherwise be spent in duplicate research. Users were virtually unanimous in their belief that a privatized NTIS would have little incentive to maintain the massive number of lesser-used documents as it would be an expensive drain on profitability.

C. Information Industry (3 comments)

The information industry agreed that the archival function of NTIS should not be replaced or altered as there can be no assurance that such a fundamental obligation would be continued by private industry. Furthermore, one re-marketer believed that this function is so important that it should be subject to necessary appropriations and review by the Congress to fulfill the obligation of a democratic Government for the benefit of the public. A potential contractor felt that today's technology should permit the maintenance of permanent archives, and suggested a ten or twenty-year storage period.

D. Analysis

All respondents except one potential contractor agreed that maintaining the archive was a critical function that should be performed by the Government as private industry could give no assurance that it would be willing or able to ensure its continuation.

Issue 5:

Generally, Federal reports entering the NTIS system cannot be copyrighted. Should legislation conferring copyright protection be included in the privatization proposal?

A. Government (3 comments)

Government respondents felt that copyright of Government intellectual properties would grant potentially great benefits to some few private sector members while denying easy and inexpensive access to the vast majority of taxpayers who underwrite the costs of generating those intellectual properties. Furthermore, some government agencies state that they could not continue to supply a private organization with their materials if the firm were granted copyright protection.

B. Users (26 comments)

Users were unanimous in their comments, feeling that copyright protection would inhibit the free flow of public information.

C. Information Industry (3 comments)

The information industry was divided in its opinion about copyright protection. One proposed contractor believed that copyrighting should not be necessary for the private operation of the NTIS system, that to do so would add a complicating factor, restricting distribution of certain documents to specific groups. A major re-marketer agreed, stating that copyright protection would have a chilling effect on the value-added use by those organizations that serve the needs of the information consumers. On the other hand, a second potential contractor felt that copyrighting would help ensure a reasonable return on investment for maintaining the inventory of documents. In addition, the contractor stated that Federal review on cost would be required to ensure this monopoly position is not abused.

D. Analysis

For the most part, all respondents agreed that copyright protection should not be included in any privatization proposal.

ISSUE 6:

NTIS source agencies often make a primary distribution before placing a report in the NTIS system. Would continuation of this practice have a substantial adverse impact on a privatized NTIS system, or render that system uneconomic?

A. Government (1 response)

The government agency that commented on this issue felt that primary distribution of Federal research and development reports by the contractor is quite limited under Title 44 restrictions. Although a change in policy would not have much influence, a private agency seeking exclusive sales rights to maximize would not like this arrangement.

B. Users (17 comments)

Users wanted agencies to continue to make primary distribution prior to NTIS distribution because of the depository library program. Others felt that the prerogative of agencies to make the initial distribution of reports is an important link in the flow of scientific information, and should continue whether NTIS is privatized or not.

C. Information Industry (2 comments)

A major re-marketer stated that under the status quo, the primary distribution of data by source agencies places no additional burdens or impediments to the collection functions of NTIS. He felt that no changes should be made. However, he added, it would be highly unlikely that privatization could co-exist with the status quo concerning source agency distribution of data. Another firm expressed the opinion that there should be enough economic flexibility to permit agencies to continue primary distribution of certain documents, particularly to the press, for a thirty day period.

D. Analysis

Respondents felt that agencies should continue to make a primary distribution before placing documents in NTIS, although one information industry firm believed that the practice would impede privatization.

ISSUE 7:

If the NTIS operation were sold to the private sector should it be sold on an exclusive basis to only a single organization, or on a non-exclusive basis to several organizations? Should the Government exercise some control over prices charged for products? How?

A. Government (3 comments)

Placing NTIS in the private sector caused government agencies and Congress to view with alarm the rise in prices that would inevitably occur. Private industry, given the need to recoup investments and maintain as high a level of profits as possible, would raise prices to levels far in excess of what a Federal agency would need to maintain itself. NTIS products may well become priced beyond what many of its institutions and smaller businesses can afford, a gross miscarriage of justice considering NTIS' enabling legislation, and the fact that these organizations have already paid once for the information with their tax dollars. One agency believed that a price control board would be needed that considers private and public needs. A second problem articulated by the agencies dealt with the fact that the profit motive would dictate that slow-moving or unpopular items would be deleted from the collection.

B. Users (49 comments)

Users, also, were alarmed at the thought of a privatized NTIS in terms of loss of availability and accessibility as well as increases in prices. Libraries believed that prices for documents and services should be set at a level that encourage utilization. They feared that a private firm, operating with with the profit motive, would create an information elite, consisting of individuals and organizations that had sufficient funds to pay for information, an action that would deny access to libraries and small users. Many users felt that price control by the Government was essential to ensure continued availability of documents. One user expressed the opinion that the present arrangement exerts price control influence because private groups can and do market NTIS reports and exert pressure on NTIS to keep prices in line with efficient production costs.

C. Information Industry (2 comments)

A potential contractor believed that if NTIS were sold, the Government would have to control prices through an index that gears prices to production costs. Another firm felt that prices should be negotiated on a regular basis depending on the medium of delivery and the size of the document.

D. Analysis

The vast majority of respondents, including the information industry, felt that government control of prices would be necessary to ensure accessibility by the public.

ISSUE 8:

The NTIS system has served as a one-stop source for the sale of much of the Federal Government's scientific and technical information. If the system were sold to several private organizations, is this one-stop feature of sufficient value to warrant some special arrangement to ensure its continuation? What form might this special arrangement take?

A. Government (4 comments)

Both government agencies and Congress commented on the value of the one-stop source. Centralizing the inventory function in NTIS has made it easier for requestors to locate scientific and technical reports generated by or for the Government. If the agency were sold piecemeal to more than one private sector organization, the centralization afforded by NTIS would be irretrievably lost.

B. Users (40 comments)

Users, such as libraries, who found the one-stop approach to locating and ordering information to be cost effective and essential to the research process, fear that privatization would increase the number of sources that might have to be contacted to obtain documents. In addition, they felt that eliminating the one-stop feature would be a significant stop backward in terms of service to the users of the information who have come to have high level of confidence in the completeness of NTIS.

C. Information Industry (3 comments)

The information industry expressed two different points of view. A potential purchaser believed that the diversity of interest among users of NTIS suggests there is no unique advantage to maintaining a one-stop organization. On the other hand, a potential contractor maintained that the one-stop feature was so important that it should be enhanced through inclusion of all agencies' documents. In addition, a major re-marketer said that the one-stop source would likely be seriously impacted by any discontinuance of NTIS' current cooperation with private industry.

D. Analysis

Both the Government and users praised the one-stop feature and believed that maintaining it fulfilled a useful purpose. The majority of information industry respondents agreed; however, one felt that because users had diverse interests, this feature could be eliminated.

ISSUE 9:

To what extent, if any, and in what specific ways has the existence of NTIS effected private organizations in the information industry? How has this, in turn, affected the dissemination of Federal scientific and technical information? How might these effects change as a result of privatizing the NTIS system?

A. Government

No comments.

B. Users (13 comments)

Some users felt that the privatization proposals presented would benefit one industry only, that one segment represented by the Information Industry Association. Others thought that the private sector should develop information products at its own expense and risk, which improves upon government service, while prohibiting the Government from duplicating in any substantial way the same tool. One user stated that no adverse impact has been generated on the information industry by the existence of the NTIS. Rather, the information industry supports the various Federal information operations by providing access to government information products and services beyond the scope of the government information operation.

C. Information Industry (3 comments)

Various segments of the information industry had different opinions about the impact of NTIS on their industry. A major re-marketer commented that any changes in NTIS' role should ensure the continuance of a non-competitive arrangement between NTIS and the private sector, that the current relationship is a model for government-industry relationships. He noted that permitting private industry to create value-added products and services has aided the U.S. information industry in providing valuable services to information consumers throughout the world. A potential purchaser/contractor stated that NTIS has greatly improved the ability of private organizations such as his to use information available from the Federal government.

One the other hand, the Information Industry Association voiced its belief that private sector firms, who could enhance public access to government scientific and technical research by making it available more efficiently and effectively, are discouraged from further investment by the presence and practices of NTIS.

D. Analysis

Except for the Information Industry Association, respondents did not believe that NTIS has been a disincentive for private sector firms to enter the market.

ISSUE 10-A:

Privatizing NTIS raises a number of other issues dealing with the effect of such proposed action on matters of board national interest, i.e., national defense, U.S. scientific and technological competitiveness and the national economy.

A. Government (8 comments)

Both government agencies and Congress thought that dismembering the Government's major depository for its scientific and technical information would only diminish the fragile national security and commercial, scientific, and technological leads the United States holds today. Such an action would constitute a disservice to American science, to private industry and to the national defense community and could well return Federal science to the information chaos of the 1940's , 1950's and early 1960's. Furthermore, agencies questioned the propriety of allowing a single enterprise to have comprehensive and early access to the major portion of Federal research results with commercial potential. Of considerable concern to agencies was the fact that a significant part of the U.S. information industry today is foreign owned, exposing the country to the possibility that the United States could lose control of its own technology base.

B. Users (61 comments)

Users believed, that for the United States to ensure the strength and viability of its international competitiveness, defense posture and economic and general well being, the availability of the unclassified scientific and technical information collected or originated by the Federal Government must not be impeded or compromised. The free flow of technical information has contributed to this country's preeminence in science and technology, with much of this information generated from Government-sponsored research projects. The Government needs to enhance access to the technical report literature to improve America's competitive position in a world where this country no longer has a near-monopoly of scientific and technological knowledge.

Users also voiced their concerns about national security issues. Because foreign investors have acquired many U.S. companies, a foreign owned corporation, securing direct or indirect ownership of the private organization performing the NTIS functions, could transfer U.S. Government research results to non-U.S. interests. Moreover, users felt that privatization would distort the NTIS system. A private firm would drop those parts that don't show a near-term return, placing the firm in the very critical role of deciding, based on its profit-oriented objectives, what areas or research will be aided by an easy exchange of information and what areas will not.

C. Information Industry (3 comments)

Prospective contractors believed that national defense was a critical issue, commenting that if the Government relinquished control over this national resource, the United States would be unable to regulate disclosure or dissemination of technical and scientific information should the need arise. They also said that any privatization alternative which did not maintain or enhance the current service offered would have an unquantified, but significant, detrimental effect on matters of broad national interest, such as U.S. scientific and technological competitiveness, with subsequent negative effects on the national economy. The Information Industry Association felt that the private sector would step in if the Government stopped collecting and organizing federally funded scientific and technical information, but held that this could be counterproductive to the public interest in that availability of federally funded scientific and technical information would be seriously disrupted, at least in the short term.

D. Analysis

Government agencies, users, and the information industry agreed that there is a legitimate governmental role in controlling federally funded scientific and technical information.

ISSUE 10-B:

Privatizing NTIS raises a number of other issues dealing with the rights of U.S. citizens to have access to the results of federally funded research and development.

A. Government

No Comment

B. Users (47 comments)

Users' responses to this issue reflected their overwhelming concern that privatization infringed upon the rights of U.S. citizens to have access to the results of federally funded research projects. They believed that the Federal Government was the only organization capable of providing the American public an open, comprehensive clearinghouse for permanent access to technical information produced by and for the Government. One user expressed his concern that certain special interests might intrude upon the process if NTIS were privatized. For example, some data might be withheld from the public so that it could be published in textbooks where greater profits might be realized; or, special interest group, e.g. pro- or anti- abortion, creationism, etc., might bring considerable economic and political pressure on a private publisher to prevent publication of dissenting information.

C. Information Industry

No Comment

D. Analysis

Access to federally funded scientific and technical information greatly concern users.

ISSUE 10-C:

Privatizing NTIS raises a number of other issues dealing with the interests of the U.S. information industry, especially those firms that might wish to participate in activities resulting from the privatization of NTIS.

A. Government (8 comments)

Government agencies that depend on NTIS services were alarmed at the thought of either privatizing or discontinuing NTIS. Agencies found that the collection and accounting services that NTIS performs are cost-effective and convenient both for the Government and the information purchasers, and doubted whether this centralized service could be continued by a commercial concern. Without this user-fee service from NTIS, agencies would have to develop procedures and capabilities to do their own billing and collecting, a time-consuming and expensive task.

Privatization of NTIS would have an adverse impact on agencies as it might preclude the recovery of funds by agencies that make data available to the public via NTIS. Furthermore, one agency said that privatization is in conflict with the general intent of OMB Circular A-130 which provides for recovering costs associated with disseminating data to the public, maximizing the usefulness of government information to others, and minimizing the cost of providing these data.

A number of agencies, as well as Congress, commented that reconfiguring NTIS as a government corporation would meet the goals of privatization as NTIS currently is placed in an unreasonable position by being asked to function as a business while adhering to many of the unbusinesslike restrictions which are placed on it.

B. Users (63 comments)

Users were virtually unanimous in their belief that the status quo should be retained, often citing the phrase, "If it ain't broke, don't fix it", as their justification. Although users preferred to keep NTIS intact, some felt that contracting out some functions, such as processing the information, microfiching, and selling and reproducing the information, was preferable to outright sale. They felt, however, that policy, as well as foreign and agency relationship, should be retained as government functions.

Some users believed that reconstituting NTIS as a public, non-profit corporation provided the best alternative, as this option would keep NTIS in the public sector, allowing government control over national security and defense information. This option would also permit foreign governments to continue to work with NTIS on a government-to-government basis and at the same time permit it to institute a number of private sector business practices which could lead to higher productivity and increased cost effectiveness. Others saw the government corporation as the most palatable alternative as it was the least disruptive. On the other hand, some users, although agreeing that a government corporation was a viable alternative, did not think that this would offer advantages over the current system. On a different note, one user feared that a government corporation would allow NTIS to bypass certain government regulations such as printing through the Government Printing Office and distributing its indices and other materials through the Depository Library program.

A few users noted that NTIS and GPO both serve to gather, catalog, and disseminate information produced by all branches of the Government, and felt that this relationship might be solidified to provide a more cost effective system for producing and disseminating Federal information.

A public service study contained proposed legislation to establish a National Technology Center within the Department of Commerce, with NTIS as the nucleus agency, to acquire U.S. and worldwide technical, scientific, and technology transfer information. The National Technology Center would operate as a national library, similar to the National Library of Medicine.

A major library suggested that libraries with large collections of technical holdings could combine their holdings into a national bibliography, acquire fiche-to-fiche- reproduction facilities, and supply microfilm copies of older reports to requestors for a fee that covered their expenses.

A large number of users commented that no justification for privatizing NTIS had been given, and wondered why privatization was being pursued for a self-supporting government agency.

C. Information Industry (8 comments)

The information industry made a number of proposals.

1. The Information Industry Association recommended that the Government use the existing system to continue to collect and organize federally funded scientific and technical information and that the private sector be responsible for providing public access to this information through the development of value-added products and services. The IIA further suggested that NTIS use the provisions of OMB Circular A-76 to contract out non-government functions, paying for this contract through appropriations. The contractor would be permitted to develop and market value-added products and services beyond the scope of the contract.
2. A major re-marketer recommended maintaining the status quo, as this non-competitive arrangement between the Government and the private sector best serves the needs of the public and increases U.S. industry's competitive capabilities in an international marketplace.
3. A prospective contractor felt that the most viable alternative was contracting with a private organization for the conduct of all NTIS activities, while maintaining it as self-supporting, with suitable incentives to encourage the operator to improve efficiency and service.
4. Another prospective contractor was interested in providing the necessary professional services to operate the entire NTIS facility or any part thereof on an on-going basis and suggested A-76 as a means of exploring the feasibility of accomplishing this.
5. One firm proposed purchasing the marketing and order fulfullment portion of the NTIS operation or entering into a no-cost contract with NTIS. Under a no-cost contract, NTIS would obtain copies of the documents, send them to the private firm for microfiche or paper format on a subscription or on demand basis. Revenues generated from the sale of the reports would be used to offset the firm's production and order fulfillment costs.
6. Another proposal involved establishing a system whereby a private operator of an NTIS-type organization would assume the full costs of its activities while paying a flat fee or royalty, or combination of the two, to the government.
7. Two firms saw advantages to breaking up NTIS into logical components, either horizontally or vertically, for operation by several companies in the private sector.

Respondents to NTIS Privatization Federal Register Notice

Constitutency-Major	Organization	Respondent
Government	Committee on Science and Technology	James Turner
	Congress of the United States	George E. Brown, Jr.
		Olympia J. Snowe
	Defense Logistics Agency	Kurt N. Molholm
	Department of Energy	Harry L. Peebles
	Department of Health & Human Services	Maria A. Friedman
	Department of Health and Human Services	Lowell T. Harmison
	Department of the Army	Pat Lambert
	Federal Communications Commission	A. D. Enty
	National Archives	James C. Megronigle
	National Bureau of Standards	Patricia W. Berger
	National Library of Medicine	Donald A. B. Lindberg
	United States Department of Agriculture	Joseph H. Howard
		W. H. Tallent
	United States Department of the Interior	Raymond A. Jensen
Information Industry	American Institute of Aeronautics and Astronautic	Barbara Lawrence
	Dialog	R. K. Summit
	Disclosure	Robert N. Snyder
	DMS	Richard Slawsky
	Information Industry Association	Kenneth B. Allen
	research publications	Sheldon I. Kramer
	System Development Corporation	Joseph L. Hughes
User		Bobby G. Griffith
		Carol A. Singer
		Carol A. Turner
		David W. Criswell
		Donni M. Hoffman
		Doris D. Westfield
		Glenda Thornton
		Kimberley Miller Granath
		Linda Marie Hoffmann
		Marc A. Levin
		Mary Beth Vanderpoorten
		Mary E. Johnson
		Melody Kelly
		Pat J. Perry
	American Association for the Advancement of Scier	Albert H. Teich
	American Library Association	Eileen D. Cooke
	Andrews Library Government Publications Dept.	Margaret S. Powell
	Arthur D. Little, Inc.	Lori Horsman
	Association of College & Research Libraries	JoAn S. Segal
	Association of Research Libraries	Shirley Echelman
	Battelle	Frank P. Gillespie
	Brookhaven National Laboratory	Donna M. Albertus
	CIA	Marilyn S. Chang
	Columbia University in the City of New York	Patricia Battin
	Committee of Information Issues	Peter H. Imhof
	Department of Community Services	Rosamond Jacob
	Depository Library Council	Diane H. Smith
	Detroit Public Library	Francis J. Buckley
	Duke University	Stuart M. Basefsky
	East Tennessee State University	Stephen Allan Partrick

Responses Received before June 20, 1986

Respondents to NTIS Privatization Federal Register Notice

Constitutency-Major	Organization	Respondent
User	Emory University	Elizabeth McBride
	FluiDyne	Marlys J. Johnson
	Gate Research Company	Margaret L. Young
	General Electric Company	Larry Chasen
	Georgia Institute of Technology	Miriam A. Drake
	Government Documents Round Table	Diane H. Smith
	Greensboro Public Library	Frank Barefoot
	Harvard Medical School	Sydney Fingold
	Hercules	Cathleen F. Partridge
	Honeywell	Margaret P. Moffett
	Individual	Patricia C. Inouye Sarah T. Kadec
	INFO II	Martha Gregory
	Information Services	Linda V. Frank
	Instrumentation Laboratory	Jacqueline R. Kates
	Iowa State University	Philip Van De Voorde
	Kansas State Library	Marc Galraith
	Kennesaw College	Pat Johnston
	Legislative Reference Library	Judith J. Field
	Long Island Library resources Council, Inc.	Herbert Biblo
	Los Alamos National Laboratory	J. Arthur Freed
	Louisiana State Library	Grace G. Moore
	Maine State Library	Barbara J. Smith Donald Wismer
	Massachusetts Institute of Technology	Jay K. Lucker
	Medical Library Association, Inc.	Raymond A. Palmer
	Minneapolis Public Library and Information Center	Julia F. Wallace
	Minnesota Department of Education	William G. Asp
	Morehead State University	Claude E. Meade
	New Enbgland Memorial Hospital	Lynn M. Thomason
	North Carolina State University	I. T. Littleton
	Northwestern University Library	Robert Michaelson
	Oklahoma State University	Vicki W. Phillips
	Pittsburg State University	Robert A. Walter
	R. W. Beck and Associates	Enid M. Slivka
	Rogers & Associates Engineering Corporation	Arthur A. Sutherland
	Salem Hospital	Nancy Fazzone
	San Diego State University	Charles Dintrone
	Special Libraries Association	Barbara L. Wagner David R. Bender Susan Starr
	St. Elizabeth's Hospital of Boston	Robin Braun
	Stanford University	Charles Early
	Stanford University Medical Center	Paula Kavathas
	Texas A & M University	Jan Swanbeck
	Texas Dept of Highways & Public Transportation	Phillip L. Wilson
	The College of William and Mary in Virginia	Alan Zoelluer
	The Pennsylvania State University	Forrest J. Remick L. R. Hettche Thomas A. Seliga Thomas W. Conkling Vladimir Micuda

Responses Received before June 20, 1986

Respondents to NTIS Privatization Federal Register Notice

Constitutency-Major	Organization	Respondent
User	The Stanford University Libraries	David C. Weber
	The State Education Department	Christine A. Bain
	The University of Kansas	Kathleen Neeley
	The University of Michigan	Grace Ann York
	The University of Rochester Library	James F. Wyatt
	The University of Santa Clara	Linda Johnson
	The University of Texas at Austin	Kathleen Eisenbeis
	The University of Utah	Roger K. Hanson
		Valerie Florance
	The University of Vermont	Robert J. Sekerak
	University of California, Berkeley	Joseph A. Rosenthal
	University of California, Davis	Marilyn J. Sharrow
	University of California, San Diego	David P. Phillips
		Dorothy Gregor
	University of California, Santa Cruz	Jeanie Jordan
	University of Illinois at Urbana-Champaign	Paula D. Watson
	University of Minnesota	Bill LaBissoniere
	University of North Carolina	Arlene Hanerfeld
	University of Oregon	George W. Shipman
	University of Pittsburgh	M. B. Miller
	University of Washington Libraries	Merle N. Boylan
	URI	John Laurence Kelland
	Utah Library Association	Cathleen F. Partridge
		Maxine R. Haggerty
	Vlannes Associates, Inc.	Peppino N. Vlannes
	Washington State University	Elizabeth P. Roberts
	West Virginia University	Harold B. Shill
	Wright State University	Audrey J. Kidder
	Yale University	Sandra K. Peterson

Responses Received before June 20, 1986

Appendix 3

Decision Analysis Center Summary

THE NTIS PRIVATIZATION DECISION ANALYSIS

Introduction

In conducting its internal review and analysis, the Task Force used a decision analysis approach known as hierarchical evaluation. Basically, this approach involves evaluating each of the possible alternatives against a common set of critical factors, or criteria, which, when taken together, will have a major influence on the final decision.

The process took place in a group setting. All alternatives and criteria were identified by the Task Force as a whole, and the evaluation was performed by the Task Force. The process was facilitated by a professional decision analyst who led the group through the practical tasks involved in constructing a technically valid model. A computer program was used to calculate results and perform sensitivity analyses. The proceedings were summarized in a report to document the definitions used and the reasons given for making certain judgments and choices as opposed to others.

Purposes

The purpose of conducting a decision analysis is, in general, not to arrive at the final decision. Rather, as in the case of NTIS privatization, the purposes are:

- To provide decision-makers, in this case the Task Force, with a technically sound way of comparing diverse options against a common set of criteria. This provides a method for equalizing all of the options so that they can be compared meaningfully. Further, the method is structured and disciplined -- all options must be evaluated using these criteria.

- To provide a method for marshalling all of the facts and information available for decision-making in a short period of time. This allows the decision-maker to determine whether enough factual information is needed and, if it is, exactly what information is needed and how it is likely to affect the outcome of an issue. This saves both time and staff resources that would otherwise be devoted to gathering data and information that is not critical to the decision.

- To provide a method (sensitivity analysis) for determining the relative strengths and weaknesses of an option or a group of options. This, in turn, usually leads to the development of new options (which correct inherent weaknesses) or the elimination of options which prove to be not feasible. The result is a set of stronger, more viable options which are able to compete with each other and which may be sharply different from the options that were apparent at the outset of analysis.

- To identify major issues that must be resolved before the analysis can be completed and a decision made.

Because the method is both quantitative and qualitative, the results are meaningful and reproducible. The process seeks consensus among the people most concerned with the issue and, at the same time, provides a method for dealing with a diversity of viewpoints.

The Evaluation Process

The NTIS privatization evaluation process involved:

- Three half-day sessions to structure the analysis; i.e. to identify and describe alternatives, to develop, weight and define critical factors (decision criteria), and determine what data and information would be needed to complete the analysis.

- Four full-day sessions to conduct the actual analysis; i.e. score each alternative in terms of how well it met the criteria, reassess and strengthen the options, identify new alternatives, identify major issues, and conduct sensitivity analyses of the results.

For purposes of this evaluation, the Task Force was augmented by in-house experts from NTIS. These additional participants contributed factual data and information on NTIS programs and operations, and provided the Task Force with "user-oriented" perspectives based on their daily dealings with external groups. All major external viewpoints were represented at this stage, including those of the information industry, source agencies, special user groups (librarians, etc.), and NTIS customers in Government, industry and the public at large.

In all, eleven alternatives were identified by the Task Force (six basic, discrete alternatives plus five different variations on some themes). These alternatives were systematically evaluated against approximately forth weighted decision criteria. The decision criteria fell into two broad groups: long-term substantive concerns, and short-term "transition" concerns. The long-term substantive concerns, in turn, were grouped into four major categories:

- Impact on users;

- Impact on U.S. Government interests;

- Impact on the information industry; and
- Degree to which the option met the goals of privatization.

Five categories of transition concerns were identified:

- Effect on cash flow;
- Short-range impact on Government operations;
- Impact on NTIS employees;
- Short-term effect on users and on information industry firms; and
- Degree of difficulty of implementation.

This approach allowed the short-term criteria (which are generally negative and mitigate toward selection of a no-change or "status quo" option) to be balanced off against the longer-term, substantive criteria (which generally emphasize the beneficial aspects of change). Using this approach kept the evaluation balanced and provided an analytical means for eliminating a natural bias on the part of Task Force members toward maintaining the status quo.

The approach also allowed the Task Force to enhance privatization options. By pointing to criteria where existing privatization alternatives were lacking, the analysis suggested ways in which those options might be improved to make them more competitive. In the final analysis, this led the Task Force to develop and consider new options during the course of the evaluation that were not "on the table" for analysis from the outset.

The timing of the decision analysis was also an important factor. The Task Force purposely waited until after the written responses to the Federal Register notice had been received. This allowed the Task Force to include all suggested alternatives and critical factors in its analysis. It also allowed the Task Force to weight the selection criteria and score the alternatives in a way that reflected prevailing public opinion, not just internal, bureaucratic views. At the same time, the public hearing process took place after the decision analysis. This allowed the Task Force to place new options, issues, and criteria resulting from the analysis before the concerned public for review and comment. Accordingly, the decision analysis became an important intermediate step, or bridge, between the original public comment process and the final public hearing process.

A major result of this, and any other, decision analysis is the identification of major issues requiring further discussion, analysis, and resolution. During the course of the evaluation, major issues were raised that required the Task Force to make certain assumptions and render preliminary judgments. Generally, these issues involve matters that cannot be neatly reduced to quantified terms for inclusion in the evaluation. They, therefore, have to be separately considered and factored into the final decision after other analyses have been concluded. In the case of NTIS privatization, several of these issues were raised. These are identified and described in Section IV of the main report. They included:

- The potential for foreign control of U.S. scientific and technical information resources;
- The question of how much risk to impose on the private sector as part of the privatization process and the corresponding question of how much risk the private sector would be willing to assume;
- The issue of continued availability of source documents, especially from foreign government sources, after privatization;
- The question of continued availability, once privatization has occurred, to customers of the numerous reports that sell in quantities of fewer than 10 copies; and
- The question of whether the analysis should favor long-term basic considerations of governmental policy and NTIS mission, or short-term considerations of operational efficiency and effectiveness.

Each of these, and other, issues had the potential to significantly alter (or even stop) the analysis, depending upon the assumptions made. Consequently, they were not dealt with by the Task Force during the analytical phase of the project. Instead, they were left for later resolution in developing the final recommendations.

Subsequent sections of this appendix provide additional details on the decision analysis that was conducted: The alternatives considered; the critical factors used; the judgments and assumptions made by the Task Force; and the results of the analysis that was performed. Additional information on the process itself, the technical basis for it, the computer models used, or other aspects of the evaluation is available from the Department's Office of Program Planning and Evaluation.

Appendix 4

Federal Register Notice #2

Agenda

List of Attendees

UNITED STATES DEPARTMENT OF COMMERCE
National Technical Information Service
5285 Port Royal Road
Springfield, Virginia 22161
OFFICE OF THE DIRECTOR

JUN 2 7 1986

Dear Colleague:

On the reverse of this letter is a copy of the June 24, 1986 Federal Register notice which announces a July 30, 1986 workshop to discuss alternatives and issues associated with the privatization of NTIS.

A copy of the agenda referred to in the June 24 Federal Register notice will be sent to you during the week of July 7, 1986.

Your participation in the workshop, or if attendance at the workshop is inconvenient, your comments on the items raised in the agenda, will be welcome.

Sincerely,

Joseph E. Clark

Joseph E. Clark, Ph.D.
Deputy Director

adjusting inequities in old farm allotments.

Authority: Secs. 301, 312, 313, 375; 52 Stat. 38, as amended, 46, as amended, 47, as amended, 66, as amended (7 U.S.C. 1301, 1312, 1313, 1375).

Signed Washington, DC, on June 16, 1986.

William C. Bailey,

Acting Administrator, Agricultural Stabilization and Conservation Service.

[FR Doc. 86-14208 Filed 6-23-86; 8:45 am]

BILLING CODE 3410-05-M

Federal Grain Inspection Service

Soybean Damage Interpretations; Meeting

Notice is hereby given of a public meeting to discuss soybean damage interpretations. The current interpretations for soybean damage factors are illustrated on 35 mm color slide transparencies placed on a special viewer. This system of slides is referred to as the Interpretive Line Slides. The Interpretive Line Slides are currently under review. Increased damage to soybeans caused by weather and harvest conditions during the last two crop years raised concerns over the appropriate interpretations of damage in soybeans. The specific Interpretive Line Slides under question are: Badly Ground or Weather Damaged, Frost Damaged, and Mold Damaged. Although not related to the above damages, the Damaged by Heat and Heat Damaged lines are also being reviewed.

FGIS procedures provide that soybeans shall be considered damaged for inspection and grading purposes only when the damage is distinctly apparent and of such a character as to be recognized as damaged for commercial purposes. It is FGIS's objective to revise the current interpretations to more adequately reflect the implications of damaged soybeans to the domestic and foreign soybean crushing industry.

Accordingly, the following meeting is scheduled:

Name: Federal Grain Inspection Service Meeting on Soybean Damage Interpretations.

Date: (July 10, 1986).

Place: Airport Kings Inn, 9600 Natural Bridge Road, St. Louis, Missouri 63134.

Time: (10:00 a.m.).

Purpose: To provide and solicit pertinent information on soybean damage interpretations and to review proposed Interpretive Line Slides for damage factors.

The agenda includes: (1) Definition of the problem, (2) presentation of the current interpretations, (3) review of proposed interpretations, (4) discussion of data on chemical analysis of samples graded under the current and proposed interpretations.

Dated: June 17, 1986.

Kenneth A. Gilles,

Administrator.

[FR Doc. 86-14183 Filed 6-23-86; 8:45 am]

BILLING CODE 3410-EN-M

DEPARTMENT OF COMMERCE

Productivity, Technology and Innovation; Study of Alternatives for Privatizing the National Technical Information Service; Open Meeting

AGENCY: National Technical Information Service, Commerce.

ACTION: Notice.

SUMMARY: The Department of Commerce is conducting a study of Alternatives for privatizing the National Technical Information Service (NTIS). On April 28, 1986 the Department issued a request for comments on this matter in the Federal Register, see pages 15868-15870. The comment period, with extensions, expired on June 10. The Department announces an open meeting and workshop for the purpose of discussing these alternatives and other related issues arising out of comments received in response to the Federal Register inquiry.

DATE: The meeting will be held at 9:30 a.m., Wednesday, July 30, 1986.

ADDRESS: The meeting will be held in the auditorium of the Herbert C. Hoover Building, 14th and Constitution Avenue, Washington, DC 20230.

FOR FURTHER INFORMATION CONTACT: Joseph E. Clark, Deputy Director, Room 4824, U.S. Department of Commerce, Washington, DC 20230. Telephone (703) 487-4812.

SUPPLEMENTARY INFORMATION: The purpose of this meeting is to encourage dialogue between those Commerce officials conducting the study and those parties who may be interested in the conduct and outcome of the study. The Department of Commerce recently requested public comment on privatization alternatives. The period for public comment, with extensions, expired on June 10, 1986. Copies of all comments received are now available for public inspection in the Department's Central Reference Records Inspection Facility (CRRIF), room 6628 in the Hoover Building. Information about the availability of these records for inspection may be obtained from Mrs. Hedy Walters at (202) 377-3271. Complete sets of the public comments are also available directly from NTIS upon payment of a fee of ten dollars to defer costs of printing and reproduction. Sets should be ordered from Joseph E. Clark at the address above. Checks should be made payable to NTIS. An agenda for the open meeting will be mailed, on or about July 7, to all parties that submitted comments in response to the April 28 Federal Register notice. Other parties wishing copies of the agenda may request them from Joseph E. Clark at the address shown above.

D. Bruce Merrifield,

Assistant Secretary for Productivity, Technology, and Innovation.

[FR Doc. 86-14180 Filed 6-23-86; 8:45 am]

BILLING CODE 3510-04-M

International Trade Administration

[Docket No. 0600-01]

Marc Andre Degeyter, Respondent; Order

On May 19, 1986 the Administrative Law Judge issued his Decision and Order in the matter of Marc Andre Degeyter, which was referred to me pursuant to section 13(c) of the Export Administration Act of 1979, 50 U.S.C. app. 2401-2420 (1982), as amended by the Export Administration Act of 1985, Pub. L. 99-64, 99 Stat. 120 (July 12, 1985) and 15 CFR 388.8(a) for final action.

Pursuant to the charging letter of July 31, 1980, Marc Andre Degeyter was charged with multiple violations of the Export Administration Act of 1979; specifically with attempting to export to the Soviet Union technical data without a validated license. Under a plea agreement concerning the criminal charges resulting from this transaction, Degeyter plead guilty to violating §§ 387.2 and 387.3 of the Export Administration Regulations issued pursuant to the Export Administration Act of 1979.

The Administrative Law Judge has concluded, inter alia, that Degeyter should be denied all export privileges for a period of thirty years.

Having reviewed the record and based on the facts addressed in this case, I affirm the decision and order of the Administrative Law Judge. This constitutes final agency action on this matter.

Dated: June 18, 1986.

Paul Freedenberg,

Assistant Secretary for Trade Administration.

[FR Doc. 86-14181 Filed 6-23-86; 8:45 am]

BILLING CODE 3510-DT-M

NTIS PRIVATIZATION WORKSHOP
July 30, 1986
9:30 a.m.

U. S. Department of Commerce
Hoover Auditorium
14th Street and Constitution Ave., N.W.
Washington, D.C.

AGENDA

9:30 - 10:30 a.m. Providing Value-Added Products and Services

Comments from some representatives of the information industry suggest that many of the products and services that NTIS now provides could be provided as well or better by the private sector, and that NTIS' involvement in the information marketplace has a chilling effect on the information industry. If NTIS restricted its activities to the basic collection, indexing, and distribution of government R&D information, other derivative and value-added products and services could possibly be provided by the private sector, thus contributing to the goals of privatization.

What products and services currently provided by NTIS are considered to be "value-added", and which ones are the private sector interested in assuming?

If the discontinuation of some of its present services caused an operating deficit for NTIS, how should the difference be made up?

10:30 - 11:30 a.m. Contracting Out

Since reducing the size of the Federal government is one of the goals of privatization, contracting out a major portion of the NTIS operation would reduce the number of Federal employees (but not the Federal payroll since NTIS' labor costs are fully paid by NTIS users). Of the various approaches to contracting, a single no-cost contract covering essentially all of the operations appears to be the best overall approach.

Would a no-cost contract be the best approach to contracting out?

How should any remaining NTIS operations (interagency acquisition liaison, contract management, etc.) be financially supported?

Would a potential contractor be willing to accept a contract that prohibited it from performing value-added or derivative services from the NTIS collection?

11:30 - 12:30 p.m. Establishing a Dealership Arrangement

Another approach to privatizing NTIS might involve establishing one or more authorized "dealers" that would, in exchange for an annual payment to the government, obtain all documents and the bibliographic file from NTIS on a continuing basis, and would provide services to the public under terms set forth in an agreement with the Department of Commerce. NTIS could accordingly reduce its staff and its functions to cover only the collection, bibliographic processing, and permanent archiving of government R&D information.

Would it be better to establish a single dealer or multiple dealers?

What amount of annual fee would it be reasonable to charge NTIS dealers, sufficient to cover the cost of continuing document collection, indexing, and archiving so that no appropriation would be required to finance NTIS?

12:30 - 1:30 p.m. LUNCH BREAK

1:30 - 2:30 p.m. Distribution of Electronic Information

While the traditional functions of NTIS have centered around R&D information in paper-copy technical report form, an increasing amount of useful information and data are being produced by the government in electronic form, e.g., economic data, census data, meteorological data, fisheries data, etc. At present, there is no central mechanism to identify, collect, and disseminate these types of raw data for those who wish to process and combine them in ways that make them more useful to the end user. The private sector information provider, as well as the information end user might be better served if the role of NTIS were enhanced to establish it as the central clearinghouse for all government electronic data as well as for R&D report literature.

How would such an enhancement of the NTIS role benefit the private information vendor and the end user?

How should such an expansion be implemented?

2:30 - 3:30 p.m.   Establishing NTIS as a Government Corporation

One of the goals of privatization is to improve efficiency of government operations. Many government organizations that perform business-like functions for the public are established as specially chartered government corporations to allow them to acquire capital equipment, personnel, and contracts with the speed and flexibility needed to operate efficiently and effectively. If NTIS were chartered as a government corporation within the Department of Commerce, it could acquire labor saving capital equipment that it now cannot acquire, could adjust its staffing to satisfy its needs, and work more flexibly with private sector information firms and contractors; and still remain self-supporting.

How would changing NTIS to a government corporation help the agency achieve the goals of privatization?

Are there any reasons why corporate status for NTIS would be inappropriate?

3:30 - 4:30 p.m.   Special Proposals

The Federal Register notice of April 28, 1986, elicited a number of new alternatives for privatizing NTIS. Some individuals believed that GPO and NTIS could be combined to create a single "super" agency to handle dissemination of the government's information. One respondent proposed legislation to establish a National Technology Center that would acquire U. S. and world-wide technical, scientific and technology transfer information for a national library similar to the National Library of Medicine. This National Technology Center, with NTIS as its nucleus organization, would become a component of the Department of Commerce. A third proposal suggested that libraries with large collections of technical holdings could combine their holdings into a national bibliography, acquire fiche-to-fiche reproduction facilities, and supply microfilm copies of older reports to requestors for a fee that covered their expenses.

Do any of these proposals satisfy the goals of privatization?

What role could the private sector play under these alternatives?

4:30 - 5:00 p.m. Continuation of Discussion of Above Topics and Discussion of Other Topics

NTIS Privatization Workshop Participants

Organization	Respondent
Information Handling Services	John F. McIver, Jr.
Information Industry Association	Kenneth Allen
Intel Community Staff	George L. Marling
Joint Committee on Printing	Bernadine Abbott Hoduski
Kadec Information Management Co.	Sarah T. Kadec
Library of Congress	Lynne K. McCay
McGraw-Hill, Inc.	Baran Rosen
	Peter D. Nallo
	William Gigler
Medical Library Association	Bradie Metheny
	Jacque Lynne Schulman
NASA	Royal G. Bivins, Jr.
	Van Wente
Nat. Council of Lib. Info. Science	Sarah Bishop
National Agricultural Library	Sam Water
National Archives & Records Adm.	Katherine Coram
	Michael L. Miller
National Bureau of Standards	Patricia Berger
National Library of Medicine	Patricia Healy
	Sally Burke
	Sheldon Kotzin
National Technical Information Service	Jack Elsbree
	Ruth S. Smith
NERAC	Dr. Daniel U. Wilde
New York University	Nancy Kranich
NFAIS	Betty Unruh
North Carolina State University	Jean M. Porter
Oryx Press	Dimi Berkner
Pittsburg State University	Robert A. Walter
PRN Associates	Peyton R. Neal
R. B. Totu Associates	Robert B. Totu
R. R. Donnelley and Sons	Frank W. Starks
	Pam Dorge
Reed Publishing	Peter Urbach
Research Publications	Helen B. Greenway
Skidmore College	Barbara Smith
Special Libraries Association	Sandy Morton
System Development Corporation	Joseph L. Hughes
Technology International, Inc.	Justin L. Bloom
Temple University	James N. Myers

Participants Who Attended July 30, 1986 Workshop

NTIS Privatization Workshop Participants

Organization	Respondent
Aluminum Company of America	Sue M. Hall
Amer. Assoc. of the Adv. of Science	Stephen B. Gould
Amer. Society for Info. Science	Linda Resnik
American Chemical Society	R. G. Dunn
American Civil Liberties Union	Allan Adler
American Library Association	Anne Heanue
	Eileen D. Cooke
	JoAn S. Segal
	Philip Von De Voorde
Aspen Systems Corporation	Ahshun Chiang
	Carol Johnson
Assoc. of American Law Schools	Noel Augustyn
Association of Research Libraries	Jala Barrett
	James F. Wyatt
Atomic Industrial Forum	Patricia J. Goldman
ATOT	Audrey M. Jackson
Battelle	Philip Livingstone
Bechtel Information Services	F. P. Jones
	Jack H. Kemeny
Chemical Abstracts Service	James V. Seals
Columbia University	Karla Pearce
	Mary H. Kay
Congressional Information Service	Mark Vonderhaar
Consultant	Deirdre Gaquin
	Judith A. Werdel
	Madeline M. Henderson
	Patricia M. McDonnell
Council of Prof. Assoc. on Fed. Stats	Katherine Wallman
Data Center	Zoia Horn
Defense Technical Info. Center	Patricia M. Gaynor
Disclosure Information Group	Robert Snyder
	Sheila Hytla
DMS Inc.	Leland Ness
	Richard Slawsky
Fed. Lib. and Info. Center Committee	James P. Riley
Garland Publishing, Inc.	Jared C. Lobdell
Government Printing Office	Michael Bright
ICT	Conrad O'Connor
IIT Research Institute	Andrew D. Farrell
Individual	John S. Sayer

Participants Who Attended July 30, 1986 Workshop

NTIS Privatization Workshop Participants

Organization	Respondent
Treasury Information Service	Elisabeth Knauff
U. S. Department of the Interior	John T. Campbell
U.S. Army	Dorothy Fisk McDysan
U.S. Department of Agriculture	Ann Whitehead
	David G. McConnell
U.S. Department of Energy	Bonnie C. Carroll
U.S. General Accounting Office	Vincent De Santi
University Microfilms International	Anita L. Werling
	Dwain H. Pearce
University of California, Berkeley	Joseph A. Rosenthal
University of Virginia	Susan Tulis
University of Washington, Seattle	Marcia J. Kuszmaul
Veterans Administration	Wendy Carter
Vlannes Associates	Paul S. Feinstein
	Peppino N. Vlannes
Washington Technology	H. Alexander
West Virginia University	Harold B. Shill
Western Illinois University	Lois Mills
Westinghouse Electric Corporation	W. D. Leggett III

Participants Who Attended July 30, 1986 Workshop

Appendix 5

Description and Analysis of Options

WITHDRAWAL FROM THE ACTIVITY

Description:

Under this option, NTIS would announce its intention of terminating its clearinghouse operation by a given date, allowing the private sector to assume whatever functions it chose. No transfer of records or information would occur; however, until the termination date, private sector firms could purchase NTIS materials and use them to establish similar services.

Analysis:

The Task Force rejected terminating NTIS because when examined closely, this option falls far short of meeting the goals of privatization in many ways. Although the number of government employees would decrease, these personnel are not now paid by appropriated funds but by user fees received from the sale of products and services. The government budget would, therefore, not be reduced. Indeed, eliminating NTIS would require terminating some 350 employees with the attendant costs of annual leave and severance pay. In addition, the money customers deposit with NTIS for future purchases would have to be returned. Calculating the close-out costs indicates that this option would transform a self-supporting activity into a one-time cost to the government of $ 8.1 million. An additional cost would be incurred by source agencies that have indicated that they would need to set up separate information dissemination operations to meet their mission requirements.

Eliminating NTIS would adversely affect many private sector firms that purchase NTIS products and add value to them before selling them. Dialog, a major re-marketer, in responding to the Federal Register notice, doubted if any private organization could replace the collection and archival function of NTIS. This respondent found that his current cooperative arrangement with NTIS allows him to lease NTIS databases and add value to them to serve the special needs of the information consumers, thus benefitting both the industry and the public. Other information industry firms commented that NTIS had improved the ability of private organizations such as theirs to use information available from the Federal Government, and stated that contracting out additional functions would provide them with more opportunities. While it is true that dismantling NTIS might create opportunities for some firms, it could also reduce opportunities for others. At the present time, as a result of contracts or other agreements with NTIS, many firms acquire NTIS products, add value to them and remarket them to the public, earning estimated revenues of over $11.7 million per year (see Appendix 6 - Calculation of Termination Costs).

Although individual firms taking over NTIS' functions might operate more efficiently due to increased competitive pressures, the customers, who depend on NTIS as both an archive and a "one-stop" source of federally funded technical reports, would lose this valuable "one-stop" source. For example, in their responses to the Federal Register notice, customers stated over and over again that disbanding NTIS would require them to go through the costly and time-consuming process of querying numerous sources for their information needs. Moreover, they would have no assurance that the reports they wanted would be available because a private, profit-making firm would have little incentive to stock low-demand reports or to maintain an archive. Government agencies also objected to dissolving NTIS as they depend on the agency to reduce their cost of disseminating scientific and technical information by archiving and distributing their reports as well as providing related brokerage services. Eliminating NTIS could cause them to go to the expense of establishing multiple, redundant functions within their own agencies to replace services that are now being done by NTIS.

Furthermore, the Information Industry Association and McGraw Hill recognizing the role of NTIS in fostering the Nation's technological advancement and innovation by making available the results of federally funded research and development, stated in their Federal Register responses that the availability of this information would be seriously disrupted if the Government should elect to stop collecting and organizing it.

During the sessions in the Decision Analysis Center, the Task Force rated this alternative as the least desirable as it neither met the goals of privatization, nor satisfied the interests of the Government, the users, or the information industry.

MERGE WITH GOVERNMENT PRINTING OFFICE (GPO)

Description:

Under this option, NTIS would become part of GPO, creating a single point of access to most of the technical and general interest reports prepared by or for the Government. Funding would consist of revenue from document sales as well as from appropriated funds.

Analysis:

The Task Force rejected this option. Although GPO has indicated an interest in this option, transfer of NTIS to GPO would shift functions from one branch of Government to another without reducing the size of the Federal work force. GPO, as part of the legislative branch, is service-oriented, while NTIS, as part of the executive branch, is mission-oriented. As the Public Printer, GPO has not been responsible for archiving the documents it distributes. Furthermore, unlike NTIS, GPO does not make documents with low projected demand available, and documents that do not live up to expectations are allowed to go out of print.

Respondents to the Federal Register notice had a mixed reaction to this option. A few users noted that NTIS and GPO both serve to gather, catalog, and disseminate information produced by all branches of the Government, and felt that this relationship could be solidified to provide a more cost-effective system for producing and disseminating Federal information. Others, including Federal agencies, objected to GPO's policy of disseminating only potential "best sellers", fearing that vital federally funded research results would never see the light of day. Federal agencies, such as NBS, said GPO is tending to offer fewer of the agencies' scientific and technical publications for sale, and has also reduced the length of time those chosen few documents are offered for sale.

The Task Force, in its deliberations in the Decision Analysis Center, gave this option low marks in many areas. Service to users as well as to agencies that rely on NTIS to disseminate their documents would deteriorate. Availability and accessibility of government information would likewise diminish, as would the Department of Commerce's abi~~lity~~ to disseminate its own information. Because GPO is mandated to handle only Federal documents, the collection would suffer in the area of acquisition from State, local and foreign governments.

Merging NTIS with GPO would not meet the goals of privatization. Not only would the size and cost of Government remain substantially the same, this option also would reduce opportunities for the private sector.

SELL NTIS

Description:

Under this option, NTIS would be sold to the private sector organization that made the highest bid. The purchaser would perform the same functions as NTIS with no more or less rights than NTIS had.

Analysis:

The Task Force rejected this option for the following reasons. Although selling NTIS realized one of the goals of privatization, namely, reducing the number of government employees, a significant cost would be incurred if this option were chosen. As in the option calling for disbanding NTIS, a sale would trigger a reduction in force which would cost the taxpayer over $4.1 million in annual leave and severance pay if that liability were not picked up by the purchaser. Assuming as a "worst" case that NTIS would have to return all customer deposits, the total cost to the Government would be $8.1 million. Because the material assets of NTIS have relatively little value, their sale would not offset the costs of privatization.

Other equally important reasons for rejecting this option emerged during the conference in the Decision Analysis Center. Selling NTIS would not support government policy about adequate availability and accessibility of government information. By allowing the marketplace to dictate which documents to provide to the public, the Government would lose the ability to ensure that the results of federally funded research and development would be available and accessible to the broadest range of people, which could severely damage U.S. competitiveness and trade objectives. Moreover, if the purchaser were controlled by foreign interests, the United States would incur an unacceptable and unjustifiable risk to both its national security and economic well-being.

The U.S information industry interests did not fare well under this option either. Although the private firm purchasing NTIS would have additional sources of revenue, current re-marketers like Dialog, Mead, and Systems Development Corporation would suffer if prices were raised or if the "new" NTIS chose to exploit its advantageous position for developing and marketing value-added services in-house.

The Federal Register responses echoed the concerns expressed in the Decision Analysis Center. Government agencies and Congressional respondents noted that Federal agencies would be reluctant to participate in a privatized NTIS. Because of the sensitivity of technology transfer to economic and military considerations, a privatized NTIS would likely receive fewer documents from Federal agencies than at present. Users' concerns centered around the question of availability of documents, noting that government agencies would not want to deal with a private sector firm, thus limiting the number of documents that would eventually be disseminated. Users also stated that a private firm would experience great difficulty in acquiring foreign technology which now comprises 25 percent of NTIS input.

The information industry commented that their interests would be seriously impaired unless some form of clearly stated policy mandated Federal agencies to make documents available to a privatized system. Otherwise, a successor to NTIS would be faced with great uncertainty as to the number and volume of documents to be handled and the resources necessary to operate the system.

Selling NTIS also raised concerns about possible higher prices coupled with a potential loss of availability and accessibility. Because NTIS operates on a "break-even" basis, private industry, given the need to recoup investments and maintain profits, would likely raise prices to a level in excess of what NTIS charges. Many users felt that price control by the Government was essential to ensure that document availability was not compromised by high prices.

Respondents also raised the archival function as a crucial issue. The House Science and Technology Committee, as well as many others, found it naive to assume that any profit-seeking organization would attempt to guarantee the continuation of the NTIS archive when such an activity would undoubtedly have to be done at a loss.

Respondents also noted a serious consequence that would occur if the private organization assuming NTIS functions went bankrupt or sold out to a second company. As the House Science and Technology Committee observed, "Once a Federal function or operation is placed in the private sector, it is virtually impossible to bring it back under the Federal aegis should either the decision prove to be unwise or should the private sector decide that the function or operation does not offer sufficient profitability to warrant its continuance."

CONTRACT OUT NTIS

Description: Under this option, NTIS would enter into a no-cost contract with a private firm which would maintain the archive and bibliography, and sell NTIS products and services to the public on both a wholesale and retail basis. The contractor would pay NTIS a royalty to cover the costs of monitoring the contract and collecting documents from government agencies and foreign sources. The contractor would be precluded from developing or providing value-added products and services without government approval, thus offering maximum opportunity to the private sector value-added firms.

Analysis

The Task Force found that this option had merit because it preserved the Government's role in ensuring the dissemination of the results of federally funded research and development. However, contracting out NTIS functions would involve a significant NTIS personnel reduction with the associated costs to the Government of $7.9 million in annual leave and severance pay or would accept the liability as part of its contract arrangement. These costs might be reduced somewhat if the contractor offers terminated employees comparable jobs before taking over the government function. Because NTIS would continue to collect material from agencies and foreign sources and would monitor the contract, some government review of scientific and technical information would be retained, although the willingness of source agencies to participate in a Government-owned, contractor-operated service was unknown.

During the Decision Analysis Center discussions, the Task Force found that this option could result in the contractor raising prices in order to earn a fair return. However, in most other respects, contracting out was comparable to the status quo.

Many of the Federal Register responses looked favorably upon contracting out. The Information Industry Association proposed that NTIS, in accordance with the provisions of OMB Circular A-76, should contract with a private firm, paying for the contract through appropriations. Furthermore, they added, the contractor should be permitted to develop and market value-added products and services beyond the scope of the contract. Other information industry firms also suggested contracting out, either using A-76 or some other mechanism, with two firms proposing some form of no-cost to the government contract. Users stated that contracting out was preferable to outright sale, but thought that specific functions, such as microfiching, should be identified as potential activities for a contract, with policy, foreign, and inter-governmental relations retained as government functions.

Two agenda items at the workshop focused on contracting out. Battelle, a prospective contractor, stated that NTIS could be operated under a no-cost contract with the contractor paying for the residual government services, such as document collection, from sale of NTIS products. However, Battelle also stated that no contract would be possible unless the contractor was free to provide value-added products and services. Users found problems with this proposal. In addition to needing assurances about the array of services a contractor would offer, and benchmarks for quality, users were concerned that the ability to provide value-added services would enable a contractor to gain monopoly control over government information.

Although contracting out appears to have merit, a number of issues must be resolved before this option could be implemented. NTIS is currently a self-supporting agency, with its operations paid for by the revenues it receives for the service it provides. Any sweeping contracting option would incur one-time costs in excess of $7.9 million dollars with no long- or short- range savings. Furthermore, a no-cost contract which best satisfies the Government's interests may not provide an attractive business opportunity for a private firm unless the firm also has authority to develop and market value-added products and services. However, allowing the contractor to provide value-added products and services is in conflict with OMB Circular A-130 which states that when agencies use private sector contractors to accomplish dissemination, they must take care that they do not permit contractors to exercise monopolistic controls.

ENHANCE NTIS

Description:

Under this option, NTIS' operational mission, role, and functions would be formally enhanced to include marketing and distribution of information in areas other than science and technology with a mandated requirement to disseminate the Department of Commerce information in electronic form. In addition, NTIS would be converted to a "wholesale only" distributor for most kinds of information, phasing out its role as a retailer. The operational tools available to NTIS would also be enhanced through establishing a Working Capital Fund. Finally, NTIS would be given the authority and responsibility for filling the void that now exists in the Department of Commerce for formulating and coordinating information policy.

Analysis:

The Task Force found that enhancing NTIS had many attractive aspects. By phasing out retail sales, NTIS would provide the private sector with new business opportunities. Unlike other options, enhancing NTIS would not trigger an immediate major reduction of force, with its associated costs. Employees that deal with retail customers could be phased out through attrition, or could be retrained to work in the area of electronic dissemination. However, this option had an attendant risk. Although NTIS would continue to collect documents and maintain the bibliography and the archive, selling them wholesale to the private sector for remarketing to the public, the Government would have no guarantee that private sector firms would make the totality of material available to the public at reasonable prices.

This option might also damage the one-stop feature of NTIS that customers found very attractive. Users, government agencies, and Congressional respondents commented on the value of the one-stop source. Centralizing the inventory function in NTIS has made it easier for requestors to locate scientific and technical reports generated by or for the Government. In addition, users such as libraries, found the one-stop access to locating and ordering information to be cost-effective and essential to the research process, and expressed fear that privatization would increase the number of sources they might have to contact to obtain documents. A potential contractor maintained that the one-stop feature was so important to customers that it should be enhanced through inclusion of all agencies' documents. Accessibility, of course, would be improved if many firms chose to sell all of NTIS' documents regardless of demand.

In contrast to this position, a few information industry firms stated that the diversity of interests among NTIS users suggests there is no unique advantage to providing a one-stop organization. Furthermore, two firms saw advantages to breaking up NTIS into logical components, either horizontally or vertically, for operation by several private companies.

The Task Force recognized that expanding NTIS' role to include distribution of all Department of Commerce's electronic databases as well as those of other government agencies would provide a valuable new service at virtually no cost to the Government and would privatize retail sales.

NATIONAL TECHNOLOGY CENTER

Description:

Under this proposal, Congress would enact legislation establishing a National Technology Center for the purpose of acquiring pertinent U.S. and worldwide scientific and technical information. NTIS would become the nucleus organization for the new Center, which, when implemented would consist of the National Technology Transfer and Information Science Center, the National Technology Library, the National Technology Network, the Center for the Utilization of Federal Technology, and the National Systems, Processing and Services Center.

Analysis:

The Task Force found that this option, although laudable, did not meet the goals of privatization and would need significant new Federal funding until the Center was self-sustaining.

PARTIAL DIVESTITURE

Description:

Under this option, NTIS would continue to collect documents, update the bibliography and maintain the archive. A single firm, or a group of private sector firms acting as a consortium, would pay NTIS an annual fee equivalent to NTIS' costs, to obtain the right to market the documents in the retail market. In addition, the firms would have the ability to develop and market value-added products and services.

Analysis:

The Task Force found some acceptable features in this option. Establishing a relationship with a private firm or a consortium of firms, whereby the Government would discontinue all retail marketing, would reduce the number of government employees by approximately 200 people. However, implementing this option would require a considerable reduction in force at a cost of $2.1 million for severance pay and annual leave, plus over $4 million in deposit account refunds. Since the current NTIS operation is self-supporting, a new cost of $6.5 million makes this option suffer from the same shortcomings as contracting out, selling NTIS, and disbanding the agency.

In order to maintain the collection, bibliography, and archive, NTIS would need an annual payment from the firm or consortium of approximately $5 million, raising the strong possibility that the private firm would raise prices. Moreover, since the Government cannot offer exclusive rights to the collection, the private sector might find this option unattractive. The Task Force also found that the current level of service to customers and source agencies would suffer, as would accessibility and availability of data if these features proved costly.

Attendees at the workshop showed little interest in this agenda item. Users felt that dividing the collection among several firms was folly at best as it would jeopardize the one-stop feature which is so critical to them. In addition, they were concerned about probable price increases, and saw significant transition problems with an attendant loss of efficiency.

During the Decision Analysis Center deliberations, this option, when measured against the criteria, proved slightly less desirable than the status quo but more desirable than selling NTIS, disbanding the agency, or merging with Government Printing Office.

Federal Register respondents commented that many Federal agencies that supply documents to NTIS would be reluctant to turn over their publications to a private entity. Others noted the impropriety of allowing the private sector to profit from selling reports that were developed with public revenues. Of grave concern was the issue of availability. Because many documents sell in very limited numbers, literally in the single digits, users were virtually unanimous in their belief that a privatized NTIS would have little incentive to maintain the massive number of lesser-used documents as it would be an expensive drain on profitability.

GOVERNMENT CORPORATION

Description:

Under this option, Congress would enact legislation establishing NTIS as a government corporation, enabling the agency to operate in a more businesslike manner. As a government corporation, NTIS would have a greater degree of flexibility than it does now, which would make it easier to serve as a government node in a cooperative, non-profit scientific and technical information network to disseminate government databases electronically. This flexibility would include the use of a public enterprise revolving fund and sufficient legal autonomy to pursue aggressively partnerships with the private sector to develop value-added products and services as well as use contractors as appropriate to perform wholesale and retail sales.

Analysis:

Many Federal Register respondents favored restructuring NTIS as a government corporation. A number of Federal agencies, as well as Congressional respondents, commented that reconfiguring NTIS as a government corporation would meet the goals of privatization as NTIS currently is placed in an unreasonable position by being asked to function as a business while adhering to many of the unbusinesslike restrictions which are placed on it as a typical appropriation-supported government agency. Users stated that reconstituting NTIS as a public, non-profit corporation provided the best alternative, because this option kept NTIS in the public sector, allowing government control over national security and defense information. This option would also permit foreign governments to continue to work with NTIS on a government-to government basis, and at the same time permit NTIS to institute a number of private sector business practices which could lead to higher productivity and increased cost effectiveness. Others saw the government corporation as the most palatable alternative as it was the least disruptive. On the other hand, some users, although agreeing that a government corporation was a viable alternative, did not think that this would offer advantages over the current system.

During the workshop, Dr. Harold Seidman, Brookings Institution, noted that NTIS meets the generally accepted criteria for the use of a government corporation because it is directed by law to provide its services on a self-sustaining basis so that the general public does not bear the cost of publications or other services. Unlike other government agencies, NTIS is obligated to provide its services to anyone who is willing to pay for them. Yet at present, NTIS possesses few of the attributes of a government corporation and does not have the flexibility necessary to perform its statutory functions with maximum effectiveness. (See Appendix 8 - Comments of Dr. Harold Seidman.)

The Task Force concluded that this alternative was not a true privatization option, but rather an attractive mechanism for operating NTIS in the Federal government in a more cost-effective way.

OBTAIN APPROPRIATION SUPPORT FOR NTIS

Description:

This option, proposed by the Information Industry Association, called for financing NTIS operations through appropriations. NTIS would continue to collect and organize federally funded scientific and technical information but would be prohibited from expanding its collection, taking on new functions, or developing additional or value-added products and services without explicit Congressional authorization. In accordance with the provisions of A-76, NTIS' functions would be performed by a private company under contract with the Government, with NTIS paying for this contract through appropriations. The contractor would be permitted to develop and market value-added products and services beyond the scope of the contract.

Analysis

This proposal, although meeting the goals of privatization, would require new Federal funding to replace an operation that is currently self-supporting.

Appendix 6

Calculation of Termination Costs

OPTION: SELL NTIS, AND WITHDRAW FROM ACTIVITY.

Assumptions:

- NTIS liquidates, see close-out estimate below for details.
- All 330 employees are displaced and paid severance pay.
- Deposit accounts must be closed and all balances returned to customers.
- U.S. Treasury would no longer have interest-free use of NTIS trust fund cash (interest @ 8 percent would equal approximately $700K per year).
- No salvage value for inventory and equipment.

Estimated Close-Out Cost
($ in millions)

ASSETS	
Cash	$ 9.4
Accounts Receivable	3.5
Net Book Value of: *	
- Inventory	.0
- Equipment	.0
TOTAL ASSETS	$12.9
LIABILITIES	
Customer Deposits	$ 7.9
Outstanding Accrued Liabilities	6.7
Annual Leave	0.6
Unapplied Collections	0.5
Subscription Escrow	1.1
Undelivered Orders	0.7
Severance Pay **	3.5
TOTAL LIABILITIES	$21.0
NET COST TO GOVERNMENT	$ 8.1

---

* Current net book value of inventory and equipment is $5.9M, however, we are assuming no salvage value.

** This amount approximates a maximum liability. Under certain situations severance pay may be avoided; therefore, the amount could be less. (Reference Federal Personnel Manual 550-48 - Supplement 990-2.)

OPTION: SELL NTIS, AND WITHDRAW FROM ACTIVITY. (cont) App. 6-2

The following annual NTIS payments to Other Government Agencies would no longer be made:

o Departmental Computer Center	$ 1,200,000
o Office of Publications	3,000,000
o Departmental WCF Services such as Personnel, Procurement, and Management Services Center	700,000
o Government Printing Office	1,500,000
o Payments to Other Government Agencies such as NASA and DOE	400,000
o SLUC surcharges to GSA	250,000
Total	$7,050,000

Conclusion:

Selling NTIS to the private sector would result in a cost of approximately $8M to the U.S. Government.

OPTION: PARTIAL DIVESTITURE

Assumptions:

- NTIS maintains inherent Government functions of collecting, cataloging, and maintaining bibliographic control, archiving Patent Licensing and CUFT.
- A considerable reduction in force would be necessary.
- Retention of 135 of the current 330 employees. Severance pay would be paid to 195 employees @ $11,000 each equaling $2,145,000. This amount approximates a maximum liability. Under certain situations severance pay may be avoided, therefore, the amount could be less. (Reference Federal Personnel Manual 550-48 - Supplement 990-2.)
- Deposit accounts must be closed and all balances returned to customers.
- No salvage value for inventory. Most assets and liabilities would be liquidated. Equipment would be retained for 135 employees. NTIS would continue to perform brokerage service, continue to lease the Database and Patent Licensing/CUFT programs and an international program would continue.

Likely 1st Year Extraordinary Costs

Annual leave	$ 355,000
Estimated severance pay	2,145,000
Deposit Account, subscription, and liability payments net of receivables and available cash	4,000,000
Total Additional First Year Cost	$6,500,000

The following annual NTIS payments to Other Government Agencies would no longer be made:

o Departmental Computer Center	$ 400,000
o Office of Publications	3,000,000
o Departmental WCF Services such as Personnel, Procurement, and Management Services Center	400,000
o Government Printing Office	1,500,000
o Payments to Other Government Agencies such as NASA and DOE	400,000
o SLUC surcharges to GSA	170,000
Total	$5,870,000

Conclusion:

This option would require an annual appropriation or payment from private vendors of approximately $5M. We are assuming revenues from leasing of the database and reimbursable accounting services would be approximately $2.3M. Patent licensing royalties (if retainable) could further offset these costs; however, royalty amounts are difficult to estimate beyond a three to five year period.

App. 6-4

OPTION: CONTRACT OUT

Assumptions:

- NTIS maintains collection function and contract monitoring. (20 employees)
- A considerable reduction-in-force would be necessary.
- Retention of 20 of the current 330 employees. Severance pay would be paid to 310 employees @ 11,000 each equaling $3,410,000.
- Deposit accounts must be closed and all balances returned to customers.
- U.S. Treasury would no longer have interest-free use of NTIS trust fund cash (interest @ 8 percent would equal approximately $700K per year)
- No salvage value for inventory and equipment.

Estimated Close-Out Cost
($ in millions)

ASSETS	
Cash	$ 9.4
Accounts Receivable	3.5
New Book Value of:	
Inventory	.0
Equipment	.0
TOTAL ASSETS	$12.9
LIABILITIES	
Customer Deposits	$ 7.9
Outstanding Accrued Liabilities	6.7
Annual Leave	0.5
Unapplied Collections	0.5
Subscription Escrow	1.1
Undelivered Orders	0.7
Severance Pay	3.4
TOTAL LIABILITIES	$20.8
NET COST TO GOVERNMENT	$ 7.9

The following annual NTIS payments to Other Government Agencies would no longer be made:

o Departmental Computer Center	$1,000,000
o Office of Publications	3,000,000
o Departmental WCF Services such as Personnel, Procurement, and Management Services Center	350,000
o Government Printing Office	1,500,000
o Payments to Other Government Agencies such as NASA and DOE	400,000
o SLUC surcharges to GSA	220,000
Total	$6,470,000

Conclusion:

Contracting out the work currently being performed by 310 Federal employees would cost approximately $7.9M.

Appendix 7

NTIS Private Sector Initiatives

Private sector revenues derived from adding value to or re-marketing NTIS products are estimated to be approximately $10.5 million each year. In addition, $1.2 million is spent on contracts with private sector companies for preparation/production/printing of NTIS products. 1/

Value-added or re-marketing revenues:

Bibliographic Products	$3.9
Technical Reports	2.1
Software Products and Data Files	4.5
TOTAL	$10.5

Contract revenues:

Bibliographic Products	$0.7
Technical Reports	0.4
Software Products and Data Files	0.1
TOTAL	$1.2

A list of some of the companies participating in these activities follows on the next page.

Information provided based on the sample year of FY85

1/ In FY87, an additional $600,000 will go out under contract for the technical reports product as a result of a new initiative involving printing/distribution of Department of Energy material.

Bibliographic Products (NTIS Bibliographic Database, Abstract Newsletters, Government Reports Announcements & Index Journal, Published Searches)

NERAC, Inc.
Digital Equipment Corporation
American Society for Metals
The American Institute of Physics
Pergamon InfoLine, Inc.
Cambridge Scientific Abstracts
American Petroleum Institute
American Institute of Aeronautics & Astronautics
Engineering Information, Inc.
Information Access Company
ANACOMP
Engineering Societies Library
The Information Specialists
Information on Demand, Inc.
University Microfilm
Princeton Microfilm
Dialog Information Services, Inc.
BRS Information Technologies, Inc.
System Development Corporation
Mead Data Central
Goodway Graphics
Braceland Brothers

Software Products and Data Files

Tech Environmental, Inc.
HMM Associates, Inc.
Exxon Research & Engineering Company
Control Data Corporation
OCLC, Inc.
E. F. Cook & Associates
Westinghouse ATS
McDonnell Douglas Automation Company
Trinity Consultants, Inc.
Relational Technology
I.P. Sharpe Associates
ICF, Inc.
Resource Data, Inc.
International Export, Inc.
Data Resources, Inc.
Chase Econometrics
Information Handling Associates
Inventory Locator Services
CACI
Sage Data, Inc.
Dataworld
Communications Consultants Services
Citibase
The First Boston Corporation

Haver Analytics
Hewport Associates
Cambridge Planning
Key Data
The Spector Report
Wharton Econometrics
Action Radio Information Service
Downtown Copy Center
Chemical Information Systems, Inc.
Amateur Radio Relay League
Radio Amateur Callback
Evans Economics
The Affordable Technology Group

Technical Reports (paper copy and microfiche)

The Book Home
Ebsco
Bernan Associates
InfoDoc
Read-More Publications
Scientific Information Services, Inc.
Haventa Limited
Information on Demand, Inc.
American Information Retrieval Service
Information Marketing, Inc.
Ballen Booksellers International
C.W. Associates
The Information Store
Blackwell North America
Global Engineering
Coutts Library Service
Information Handling Service
The Book House
Faxon
T/C Publications
Western Union
Logical Technical Services
Hernon and Company

Appendix 8

Comments of Dr. Harold Seidman

App. 8-1

Harold Seideman
Guest Scholar, Brookings Institution
Former Assistant Director for Management and Organization
U.S. Bureau of Budget

Establishing NTIS as a Government U.S. Corporation

The Government Corporation in the United States did not emerge full blown in its present form but evolved over a period of many years from efforts to devise a government agency which would be fully accountable to the President and the Congress but possess the operating and financial flexibility to manage efficiently new types of government businesslike activities. These public enterprises had certain distinguishing characteristics which clearly set them apart from traditional government programs: (1) users, rather than the general taxpayer were to pay for the cost of goods and services; (2) expenditures necessarily fluctuated with consumer demand and it would be counterproductive to impose annual limitations; and (3) flexibility was essential to respond to the dictates of the market.

Experience demonstrated that imposition of administrative and financial control systems devised for totally different types of government activities made it difficult or impossible for these enterprises to operate effectively without maintaining suitable accountability and control. The Government Corporation Control Act of 1945 for the first time formally recognized the need to provide budgetary, audit, accounting and other fiscal controls specifically designed for revenue-producing and self-sustaining enterprises and to safeguard "reasonable autonomy and flexibility" in implementing corporate programs.

Without question the NTIS meets the generally accepted criteria for the use of a government corporation. It is directed by law to provide its services on a self-sustaining or self-liquidating basis so that the general public does not bear the cost of publications or other services. Unlike other government agencies, NTIS is obligated to provide its services to anyone who is willing to pay for them. Yet at present NTIS possesses few of the attributes of a government corporation and does not have the flexibility necessary to perform its statutory functions with maximum effectiveness. It is indistinguishable from other non-revenue producing components of the Department of Commerce with respect to legal status, budget, accounts, audit, personnel and procurement regulations, etc.

NTIS does have limited authority to utilize its revenues. Under 15 U.S.C. 1526 revenues may be deposited in separate accounts (classified in the budget as a trust fund) and utilized to pay the costs of providing services or to repay appropriations. Question has been raised as to whether these funds may be used to finance capital investments. NTIS does not have any borrowing authority to finance capital costs or accounts receivable. Expenditures from the NTIS account are subject to annual limitation in appropriation acts.

Conversion to a government corporation would in no way alter the statutory mission of NTIS. Government corporations are "businesslike" or "business type," not businesses whose purpose is to earn a profit. Exceptions are Conrail and Amtrak which are destined for transfer to the private sector. In the language of the Supreme Court, "[t]hat the Congress chose to call it a corporation does not alter its characteristics so as to make it something other than what it actually is, an agency selected by the government to accomplish purely governmental purposes," (Cherry Cotton Mills v. United States). It should be emphasized that government corporations are Federal agencies with Federal employees established to achieve a public purpose. They differ from other Federal agencies only in the means employed to accomplish the public purpose. Government corporations are inherently no less accountable, but different methods and skills are required to maintain appropriate accountability.

The Government Corporation alternative by no means rules out "privatization," where warranted, of some of the services now provided by NTIS. A government corporation would be in a much better position to develop innovative arrangements with the private sector including dealerships and contracts.

In considering alternatives, the ultimate test should be whether it enhances or impairs NTIS's capacity to achieve the goals set by the Congress--the collection and widest dissemination on a cost basis of scientific, technical and engineering information.

Appendix 9

History of Privatization at NTIS

Background on Privatization of NTIS

The National Technical Information Service is a technical transfer service which collects, processes, promotes, and publishes scientific, technical, and engineering information produced by domestic and foreign sources and the Federal Government. NTIS markets the information to business, the public, and Government agencies. Much of the foreign information is obtained through bi-lateral agreements with other countries. In addition, NTIS is the central source for federally generated machine processible data files, manages the Federal Software Exchange Service for GSA, and acts as the central patent licensing agent for the Federal Government.

The NTIS collection is approaching 2 million titles, all of which remain permanently available. Between 70 and 80 thousand new publications are added annually, more than any other publisher in the world. In addition, over 2.5 million reports are distributed each year.

History

For 40 years, the NTIS and its predecessor organizations have served as the focal point for the collection, announcement, and dissemination of unclassified U.S. and foreign Government-sponsored research and development reports and translations. In 1945, an Executive Order established the Publications Board to collect and declassify World War II technical data for use by industry. Shortly thereafter, the U.S. Department of Commerce established the Office of Technical Services (OTS) to consolidate the activities of the Board and other organizations. A public law enacted in 1950 directed the Secretary of Commerce to set up and maintain a national clearinghouse for scientific and technical information to be implemented through the Office of Technical Services.

By 1964, the growing national requirement for technical information caused the Federal Council for Science and Technology to recommend expanding the clearinghouse function. This recommendation resulted in the formation of the Clearinghouse for Federal Scientific and Technical Information (CFSTI) on the foundation of OTS. In 1970, the Department of Commerce abolished CFSTI and transferred its functions to the newly formed National Technical Information Service. NTIS operates under the authority of Title 15 USC (1151-1157) which requires that NTIS offer its products and services for sale on a self-supporting basis. Accordingly, NTIS now recovers virtually all of its operating costs from sales revenues.

Subsequent legislation and Executive Orders expanded NTIS' mission. An Office of Government Inventions and Patents was formed in 1974. In 1980 the Stevenson-Wydler Act created the Center for the Utilization of Federal Technology to handle specialized applied technology products as well as Federal patent licensing. The latest expansion, which occurred in 1981 required NTIS to assume the functions of maintaining the Smithsonian Science Information Exchange data base on current Federal research projects, and to offer public access to this data base through commercial vendors.

Title 44 USC also affects NTIS. NTIS printing and reproduction requirements are performed by the Government Printing Office as requirec under Section 501. In addition, Chapters 1, 3, 5, 17, and 19 which deal with the Joint Committee on Printing, the Government Printing Office, the Public Printer, the Supervisor of Documents and Depository Libraries respectively impact NTIS.

Privatization Proposals in the 60s

Even before NTIS was established in its current format, questions had been raised as to whether or not NTIS should be a Government agency and if its role in performing technical information functions was an appropriate one. In 1965, Dr. Mortimer Taube, Board Chairman of Documentation, Inc. began discussions with the Department of Commerce to explore the idea of NTIS as an independent organization with commercial properties. Dr. Taube's sudden death aborted the discussions. In 1968, Leasco, Inc. proposed taking over NTIS (then the Clearinghouse) into the private sector, but the change of administration and Leasco's business reversals led to dropping that proposal.

During the mid 60s, the view of information as a marketable commodity emerged as private firms realized that generating information products was rapidly becoming the largest industry in the United States. This awareness led, in 1968, to the formation of the Information Industries Association. IIA believed that NTIS was conceived to foster the growth and development of its commercial counterparts in the private sector as well as to make Government-generated information available to both the public and private sectors.

NTIS Cooperation with Private Sector

NTIS has a history of working with the private sector. In the late 60s, NTIS was one of the first Federal agencies to make its bibliographic data base available to private vendors in electronic form. Currently, four private vendors lease the data base from NTIS, load it on their online retrieval services, and provide access to the public. The NTIS data base, which ranks seventh in usage in the world, thus generates approximately $5 million in annual revenue for the private sector. NTIS receives about $1 million in use fees from these vendors and other leasees.

In addition, NTIS has entered into agreements with private data base producers whereby searches of their data bases provide composite listings of the latest publications in subjects of interest. NTIS pays $500 thousand to the firm which performs and publishes the searches as well as $200 thousand to the data base producers for use of their products.

In 1985, NTIS entered into a new venture with a private sector firm to make the bibliographic data base available on optical discs. Potential revenues for the firm from this initiative have been estimated at $5 million.

The private sector also gains revenue through use of other NTIS products. From its inception, NTIS has made its documents, microfiche, software, and data files available to the public at cost. As a result, a healthy market has developed whereby firms purchase these products, add value by repackaging them in different formats and sell them to the public at a profit. Revenue to the private sector from these activities has been conservatively estimated at $4 million.

Privatization Studies in the 70s and 80s

During the 70s, interest in moving NTIS to the private sector surfaced again. As part of President Nixon's New Federalism program, the Department of Commerce was asked to review its programs to seek out opportunities to transfer to the private sector appropriate activities of a commercial nature. NTIS was one of the objects of this review. The director of NTIS submitted a proposal to the Assistant Secretary for Science and Technology, recommending that NTIS be "spun-off" as a new corporation, located in the private sector, but with major Government stock interests. Although his proposal was not accepted, interest in privatization remained.

OMB Circular A-76 provided the next impetus to privatization. During the budget cycles between FY 1981 and FY 1985, NTIS conducted A-76 reviews to determine if certain functions could be performed more efficiently by the private sector. Four functions were reviewed: input processing, subscriptions, information analysis, and order fulfillment. In each case, the cost comparison showed that it was cost effective to retain the function in-house.

In 1981, in keeping with the Reagan Administration's philosophy that the Government should not be performing functions that could more properly be performed by the private sector, the Department of Commerce was asked to examine the issue of privatizing NTIS. The Assistant Secretary of Commerce for Communications and Information invited the Information Industry Association to suggest some thoughts on the subject of the private sector's providing the information products currently offered by the National Technical Information Service. Based on IIA comments, the Assistant Secretary concluded that substantially all NTIS functions could and should be performed by private industry. A task force was then formed to examine various privatization options.

The task force recommended to the Secretary of Commerce that NTIS contract out the entire clearinghouse function including collection, indexing, editing, production, promotion, sales and distribution. As a result, OMB, in December 1982, zeroed NTIS out in the passback for FY 1984 directing the agency to privatize. After a change in executive level personnel, the Department reexamined the task force report and concluded that the privatization was inappropriate for NTIS. A subsequent appeal to OMB restored NTIS.

In 1983, NTIS published a notice in the Federal Register seeking commercial vendors to distribute technical reports. Although several vendors reviewed the operation and discussed this possible take-over of report distribution with NTIS, to date no vendor has shown willingness to do so.

In late 1985, as part of the FY 1987 budget planning, OMB requested the Department of Commerce to convene an Industry/Government working group to develop a privatization proposal for NTIS to be considered in the 1988 President's budget. All alternatives are to be explored, including selling the operation to the private sector. NTIS plans to explore all issues and options to arrive at a recommendation that will provide the best future direction for the agency.

Congressional Research Service
The Library of Congress

Washington, D.C. 20540

PRIVATIZATION OF THE NATIONAL TECHNICAL INFORMATION SERVICE

Jane Bortnick
Assistant Chief
and
Nancy R. Miller
Analyst, Information Science and Technology
Science Policy Research Division

February 25, 1987

PRIVATIZATION OF THE NATIONAL TECHNICAL INFORMATION SERVICE

INTRODUCTION

The National Technical Information Service (NTIS), part of the Department of Commerce, serves primarily as a clearinghouse for scientific and technical information (STI) resulting from research undertaken by and for the U.S. Government, as well as for similar reports from State and local governments, universities, professional associations, and foreign governments. In the FY88 budget appendix, the Administration stated that, in 1988, the private sector will be offered the opportunity to operate NTIS. The plan calls for the entire operation to be contracted out, with the Federal Government retaining overall policy direction.[1] This decision by the Office of Management and Budget (OMB) followed a Federal Register notice and request for public comment concerning a Commerce Department study of alternatives for privatizing NTIS,[2] and a July 1986 workshop which discussed these alternatives and other issues.[3]

In the Federal Register notice and request for public comment, the Commerce Department identified other alternatives for privatizing NTIS operations, some of which would require legislation. These include the following: discontinuing NTIS operations and allowing the private sector to pursue whatever opportunities that discontinuation offers; selling the entire NTIS operation to one or more private organizations; selling portions of NTIS; or establishing NTIS as a Government corporation, nonprofit corporation, or some other form of public or private special-purpose organization.[4]

---

[1] U.S. Executive Office of the President. Office of Management and Budget. Budget of the United States Government, Fiscal Year 1988. Washington, U.S. Govt. Print. Off., 1987. p. I-79.

[2] U.S. Dept. of Commerce. Productivity, Technology, and Innovation; Study of Alternatives for Privatizing the National Technical Information Service. Federal Register, v. 51, no. 81, Apr. 28, 1986. p. 15868-15870.

[3] U.S. Dept. of Commerce. Productivity, Technology and Innovation: Study of Alternatives for Privatizing the National Technical Information Service; Open Meeting. Federal Register, v. 51, no. 121, June 24, 1986. p. 22959.

This memo discusses some of the major issues associated with a privatized NTIS and identifies related risks and benefits.

NTIS OPERATIONS

For 40 years, NTIS and its predecessor organizations have been a central source for collecting and disseminating unclassified U.S. and foreign government-sponsored research and development reports and translations. All reports in the NTIS collection are permanently available for sale to individuals, schools, libraries, businesses, U.S. Government agencies, and foreign governments. Since NTIS is required by law to be self-supporting, the agency charges users for its products and services to recover operating costs. This does not include some $500,000 in budgetary appropriations for the patent licensing program. NTIS has approximately 350 employees; in FY85, earned revenues were $21.3 million.[5]

Other NTIS activities include:[6]

o acquiring and distributing federally produced computer programs and computerized databases;

---

[4] Dept. of Commerce, Federal Register, Apr. 28, 1986, p. 15869.

[5] Ibid., p. 15868-15869.

[6] Ibid., p. 15868.

- operating the Federal Research in Progress (FEDRIP) program, which provides information describing on-going federally funded research projects in the physical, engineering, and life sciences;
- assisting State and local governments in furthering their technology transfer programs;
- operating the Center for the Utilization of Federal Technology (CUFT), as called for in the Stevenson-Wydler Technology Innovation Act (P.L. 96-480);
- acquiring and licensing Government-owned patents with significant commercial potential; and
- providing accounting and production services to Federal agencies, and technical assistance for the Agency for International Development's efforts to transfer U.S. scientific and technical information to developing countries.

ISSUES RAISED IN THE FEDERAL REGISTER NOTICE

In the *Federal Register* notice, the Department of Commerce identified several key issues to be addressed in evaluating the transfer of NTIS to the private sector.[7] NTIS received 138 responses, of which 15 came from Government agencies and Congress, 10 from information industry firms, and the remaining 115 from individuals and organizations that use the service.[8]

The transfer of NTIS to the private sector entails both risks and benefits. Most respondents to the NTIS *Federal Register* notice cited substantial disadvantages associated with a private sector-operated NTIS. Generally, users of NTIS are pleased with the current operations and are concerned about difficulties that could occur with a shift of NTIS to the private sector. These concerns focus on the following.[9]

---

[7] Ibid., p. 15869-15879.

[8] U.S. Dept. of Commerce. NTIS Privatization Study Responses to Apr. 28, 1986 Federal Register Notice Request for Public Comment. Springfield, Va., NTIS, 1986. 373 p.

Impact on Federal Agency Participation. Since Federal agencies are under no statutory obligation to place reports in the NTIS system, and often use NTIS as a secondary distributor, agencies may be reluctant to cooperate with a privatized NTIS. Such a situation could limit the number of available documents.

Impact on Exchange of Technical Information with Foreign Governments. NTIS has numerous agreements with foreign governments to exchange STI. Since foreign governments seem to prefer working on a government-to-government basis, a privatized NTIS could encounter difficulties in formulating mutual exchange agreements to acquire foreign STI.

Impact on Archival Function of NTIS. Since many of the reports in the NTIS system have a limited audience (on average, NTIS sells less than 10 copies of each report it acquires)[10], a private firm endeavoring to make a profit could be discouraged not only from selling certain studies, but also from ensuring their permanent availability.

Need for Copyright Protection for Federal Reports. To help ensure a reasonable return on investment for a private company operating NTIS, it may be necessary to confer copyright status on Federal reports--which generally cannot be copyrighted--entering the system. Such action, however, could restrict easy and inexpensive access to data by the public who, as taxpayers, helped underwrite their costs.

---

[9] Ibid.

[10] U.S. Dept. of Commerce, Federal Register, Apr. 28, 1986, p. 15868.

Impact on Prices. To make a profit, many respondents to the *Federal Register* notice feel that a private firm operating NTIS will have to increase prices for NTIS products and services. Without Government control or oversight of prices, the increase could limit access for those individuals and organizations with limited funds for such products and services, thereby denying access to less affluent users and libraries.

Impact on One-Stop Feature for Federal Government STI. If NTIS functions were sold or contracted out to several private organizations, the value of NTIS as a one-stop source for the sale of much of the Federal Government's STI would be lost, thus diminishing service to users.

Impact on Primary Distribution of Reports by Source Agencies. Many Federal agencies which participate in the NTIS system often make a primary distribution before placing reports in NTIS. With a privatized NTIS, this practice could make it difficult for a firm to make a profit.

The proposal to contract out NTIS' activities reflects the Administration's policy to reduce the size of government and to turn over operations to the private sector that do not have to be Government functions. The Administration prefers reliance on private enterprise where possible, and this has been emphasized in recent information policies, such as OMB Circular A-130 on Management of Government Information Resources. They believe that private sector provision of information services can offer economic advantages, both to the Government and to private industry.

Representatives of the information industry have claimed that the private sector could operate the agency more efficiently and effectively, thus enhancing public access. They assert that, despite existing cooperation with NTIS--

such as purchasing NTIS products, adding value, and selling them to the public at a profit--the existence of NTIS discourages private enterprise from further investment in this field. To respond to certain concerns of NTIS user groups as well as to increase the potential of making a profit on NTIS operations, the information industry firms made several suggestions such as: (1) establishing a policy to require Federal agencies to place their documents in the NTIS system; (2) reducing source agency distribution; and (3) providing appropriated funds to pay for archiving NTIS documents. These would require legislative action and, although they might remedy certain problems, could raise others.

Another question raised by OMB's proposal to contract out NTIS operations is the cost saving to the Government. Since NTIS covers operating costs through revenues from the sale of its products and services, the Federal budget would not be reduced. On the contrary, there might be costs incurred from contracting out NTIS operations. For example, if the NTIS workforce is eliminated, there could be costs to the Government such as severance pay and annual leave. In addition, costs could be incurred from deposit account refunds. It is unclear whether or not the private contractors would include these costs in their bids, or if the Government would be responsible for covering them.

A further issue to consider concerns the difficulty and expense of reconstructing NTIS if a contractor decides to discontinue operating the system. In addition, there is a possibility that the contractor with the best offer could be: a foreign company; or a U.S. company later purchased by a foreign firm. For example, in recent years, several European companies have purchased firms in the United States that are well established in providing on-line information services.[11] It is uncertain if either the executive branch or Congress would find this acceptable, particularly in light of the heightened concern over U.S. competitiveness and technology transfer.

Given the constraints of the current law, Congress may wish to consider whether or not changes to NTIS statutory authority would be required to make operating NTIS attractive to the private sector. Moreover, legislation may be required to transfer NTIS' functions to the private sector under any conditions. A legal analysis of this issue was prepared by the American Law Division (ALD) of Congressional Research Service several years ago and is attached as an appendix.[12]

Timely access to a broad range of scientific and technical information is a vital component of the Nation's technological and economic base. The value of STI to U.S. competitiveness has been widely recognized both in Government and the private sector. Ensuring the continued availability of STI to users of NTIS is the primary concern raised by respondents to the Commerce Department's Federal Register notice. How to achieve greater efficiency and improved information services through private sector operation, while maintaining the benefits of the existing NTIS operation, is the issue of current debate. Congress may wish to consider whether or not the current OMB proposal for contracting out NTIS' activities will achieve the goal of improving access to the results of U.S. and foreign research and development, what specific actions might be necessary to ensure its success, and what alternative approaches might be examined.

---

[11] U.S. Dept. of Commerce. A Competitive Assessment of the U.S. Information Services Industry. Springfield, Va., NTIS, 1984. p. 26.

[12] U.S. Library of Congress. Congressional Research Service. Transfer of the National Technical Information Service to the Private Sector. (Memorandum) American Law Division, Jan. 28, 1982. Washington, 1982. 6 p.

Utah Library Association

2150 SOUTH 3RD WEST, SUITE 16 SALT LAKE CITY, UTAH 84115

Gerald A. Buttars
Executive Secretary

March 10, 1987

The Honorable Representative Robert A. Roe
Chairman, House Committee on Science, Space and Technology
2243 Rayburn House Office Building
Washington, D.C. 20515

Dear Sir:

The Government Documents Round Table of the Utah Library Association is deeply concerned about the possible privatization of the National Technical Information Service, which is currently the subject of hearings by your committee. NTIS has more than adequately served the needs of libraries and individuals who have used its services. GODORT does not understand why privatization is necessary. The agency does not add to the government's deficit since it is completely self-sustaining by law; nor is NTIS in competition with any private publisher, since any company could publish reports in the NTIS collection that are not under copyright.

GODORT's major concerns about the privatization of NTIS center around its effect on public access, as follows:

> The clearinghouse concept. Being able to locate the research and development reports funded by the government in one place is vital to the public interest. It seems unlikely that one company could, or would want to, assume the entire responsibility.
>
> Integrity of the collection. The profit motive of a private company would lead to: 1) weeding of parts of the collection that do not sell, and 2) acquisition of only those reports that appear to have the most commercial value. Current research is often based on earlier research, making older reports of lasting value.
>
> Continuity. Private companies are subject to bankruptcy and failure; in such an event, no continuity would be assured. It is possible that the government could find itself buying back its own information to ensure access. Of grave concern is the possibility that, with the trend in acquisition of U.S. companies by foreign investors, information of the United States Government could become the property of foreign companies.

> Increased prices. A private company would have no choice but to raise prices, since their motive is profit, while NTIS attempts only to meet costs. This would impact the purchasing power of all NTIS users, including libraries, but especially small businessmen, who make up 75% of the present NTIS customers.

We urge your committee to recommend that NTIS not be privatized. The federal government should manage its own information in a manner to provide the best access for the benefit of its people. Our democratic way of life will survive only if the government continues to fulfill its responsibility to citizens of ensuring their access to information produced by their government.

Respectfully yours,

Maxine R. Haggerty

Maxine R. Haggerty, Chair
Government Documents Round Table (GODORT)
Utah Library Association

Address:
Documents Division
Marriott Library
University of Utah
Salt Lake City, Utah 84112

NEW YORK
THE STATE OF LEARNING

THE STATE EDUCATION DEPARTMENT [illegible]

THE NEW YORK STATE LIBRARY
STATE LIBRARIAN AND ASSISTANT COMMISSIONER FOR LIBRARIES

February 19, 1987

The Honorable Doug Walgren
Chair, House Subcommittee on Science,
  Research and Technology
2321 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Walgren:

I am writing about the Office of Management and Budget (OMB) proposal to contract out the operation of the National Technical Information Service (NTIS). The NTIS is important to libraries and information users as a unique centralized source and permanent repository for Federal, international, local, and other unclassified scientific and technical reports. Its catalogs, indexes, abstracts and other bibliographic services and cooperation with the U.S. Government Printing Office are key to efficient systems for making important reports available to people who need them.

I hope the House Subcommittee on Science, Research and Technology will hold early hearings on this astonishing OMB proposal, and that concerned librarians in New York State will be invited to provide the Committee with information on the NTIS program.

Sincerely,

Joseph F. Shubert

Joseph F. Shubert
State Librarian and Assistant
  Commissioner for Libraries

FEB 19 1987

A LAND-GRANT UNIVERSITY
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
Blacksburg, Virginia 24061
UNIVERSITY LIBRARIES OFFICE OF THE DIRECTOR (703) 961-5593

16 February 1987

The Honorable Frederick C. Boucher
House of Representatives
428 Cannon House Office Building
Washington, DC 20515

Sir:

The Office of Management and Budget has recently recommended that the National Technical Information Service (NTIS) be offered to the private sector for operation. The library community is very much opposed to such a move, which could have serious impact on our ability to access scientific information. Virginia Tech is a subscriber to a great many NTIS documents which are necessary to our programs in the sciences and engineering.

We fear that by moving NTIS into the for-profit sector, we will have to pay much higher prices for NTIS products and services which are the result of government sponsored research. We also fear that there may be permanent loss of important technical information if certain items do not make a profit for the contractor. Contractors may also begin to exert copyright privileges over government information. Serious lapses of NTIS information could also occur if a contractor went out of business or contract negotiations broke down.

I strongly urge you to oppose the privatization of NTIS.

Very truly yours,

Paul M. Gherman

Paul M. Gherman
Director of Libraries

PMG/mch

cc: Senator Donald W. Riegel
Representative Doug Walgren
Association of Research Libraries

Georgia Institute of Technology
Atlanta, Georgia 30332

TECH

Academic Affairs
Price Gilbert Memorial Library

March 2, 1987

The Honorable Doug Walgren, Chairman
Subcommittee on Science, Research, and Technology
Attn: Mr. James Turner
2319 Rayburn House Office Building
Washington, DC 20515

Dear Mr. Chairman:

The purpose of this letter is to urge that the Congress take every possible step to prevent the privatization of the National Technical Information Service. Please include this letter in the hearing record of March 4, 1987. Scientists and engineers in industry and academe oppose this measure. The Office of Management and Budget is attempting to impose privatization despite the virtual unanimous recommendation from the scientific community that technical information be disseminated by NTIS as part of the Federal Government. Privatization of NTIS is contrary to technological development and the nation's interests in the world economy. The following matters should be carefully reviewed by the Congress.

1. Would any business be able to provide a central computerized bibliographic data base with free text searching for both current and historical information at a cost affordable to researchers in academic institutions? The system would need to be available to the entire scientific and technical research community at a reasonable cost in order to serve as a technological stimulus.

2. Would any private business be able to include the scope of technical materials produced by foreign governments and in foreign languages received by NTIS as a result of intergovernmental arrangements?

The White House press release, entitled, "The President's Competitiveness Initiative", January 27, 1987, lists a variety of initiatives designed to advance science and technology in the U.S. The release states, "The President will issue an Executive Order to improve industry access to the Federal science and technology enterprise: . . .To promote technology transfers and commercial spin-offs from Federal research and development efforts. . .To ensure that our industry and academia benefit from research and technology abroad, the Departments of State and Commerce and the National Science Foundation will develop a mechanism to ensure that information on foreign research is made available in a prompt and efficient manner".

These initiatives are welcome by scientists, engineers and librarians. The privatization of NTIS is inconsistent with these initiatives.

3. What would be the effect of a foreign owned company winning the contract for NTIS services? Would the company withhold information from U.S. scientists in order to give foreign scientists a competitive edge? If a foreign owned company were disseminating technical information, would the U.S. Government have to purchase information from the company? Many information companies are foreign owned. Last week, the Government announced award of a contract to Aspen Systems Corp. to operate the library at NOAA. Aspen Systems is owned by WOLTERS SAMSOM GROEP N.V. of the Netherlands.

4. Would any private business be willing to maintain an archival collection of all technical information regardless of frequency of use? Such an archival collection is essential to the work of U.S. scholars.

5. Would any private business be willing to share dissemination functions with the agencies of government? No private firm should be the sole source for public access to federal technical information.

6. Would any private business be able to provide services that did not produce a profit? In any such system there would have to be immediate availability to little used information along with permanent maintenance of related bibliographic records. Private industry must make a profit in order to stay in business. Would it be necessary for the Federal Government to provide a subsidy to maintain services which did not make a profit?

7. What is the primary factor for determining how technical information should be distributed? The national interest should be the primary factor used in determining the dissemination process. It is in the national interest that federal technical information serve as a stimulus to innovation in science and engineering. The broadest dissemination will result when distribution is carried out on a cost recovery basis. Prices established to meet a profit requirement would become a formidable barrier to the free flow of information among scientists and engineers. It is precisely to remove such barriers and to promote innovation and economic growth that the Congress has established and maintained the Depository Library Program, the Patent Depository System, and NTIS.

8. Should any business be given a copyright to federal information? Could any business afford to undertake the functions of NTIS without copyright protection? Federal information according to present statute cannot be copyrighted. It is intended that federal information should be available for free and unrestricted use. It is not in the national interest that federal information carry a copyright restriction.

The contracting out or privatization of NTIS would adversely affect the ready access to scientific and technical information which is essential for research, technological development and improvement of the competitive position of our nation in the world economy. Continuance of NTIS and its important functions of information dissemination will ensure that U.S. scientists and engineers have both domestic and foreign technical information. It also will ensure that the citizens of the U.S. have NTIS disseminated information on health, safety, education and other subjects.

I urge the Congress to actively promote the interchange of information and ideas, not suppress them.

Sincerely,

Miriam A. Drake

Miriam A. Drake
Director of Libraries

MAD:tgd

cc: Jaia Barrett
Georgia Congressional Delegation
Patty Bartlett
Tom Hamall
John Hooper
Tom Stelson
Henry Bourne

EMORY UNIVERSITY
General Libraries
Robert W. Woodruff Library
Atlanta, Georgia 30322

March 3, 1987

Honarable Doug Walgren
Chair, House Science and
Technology Committee
Rayburn House Office Building
Washington, DC 20515

Dear Congressman Walgren:

This letter is in response to the Office of Management and Budget's current proposal to privatize the National Technical Information Service (NTIS). I write as a documents specialist at a large university library, and as a teacher of a graduate level course on government information systems. In both roles, I am very familiar with and value the work of NTIS which is, as you are aware, the central clearinghouse for technological information from the Federal government. NTIS has for many years been one of the most progressive agencies on Federal government -- extremely responsive to its users and to new technologies.

The current OMB plan for NTIS is buried in the Appendix to the Budget For FY 1988, I-F9: "In 1988, the private sector will be offered the opportunity to operate NTIS on contract, with the government retaining overall policy direction." No further information is available as to how OMB will implement this plan and no rationale has ever been given as to why OMB is moving to privatize NTIS at all. As you know, there will be no budgetary savings gained by OMB's plan. Title 15 of the United States Code mandates that NTIS be self supporting. NTIS is sustained entirely from sales income rather than tax dollars. What will result from OMB's plan, however, is confusion on the part of business and academics as to where to go for federal scientific information. NTIS's current role as a central clearinghouse for this type of resource greatly simplifies access. Just as the vast majority of phone company users regret the dismantling of AT&T, I guarantee that few scientists or businessmen will be pleased with the dismantling of NTIS. Among the likely outcome of OMB's move are:

- expected increase in prices for NTIS products and services,
- possible loss of permanent availability of material in the collection,

- the difficulty of a contractor negotiating agreements with other governments (and with other agencies of the Federal government),
- the possibility that a contractor could exert copyright privileges over government information,
- the negative impact on NTIS collections and services if a contractor goes out of business or ceases to renew the contract.

Certainly now, as Congress seeks ways to restore the "competitive edge" to the United States economy, is not the time for the government to dismantle one of our basic scientific information systems. I ask for your assistance in defeating this proposal.

Sincerely,

Elizabeth McBride
Head, Documents Center

Allied Signal

Allied-Signal Inc.
P.O. Box 1021R
Morristown, NJ 07960
Telephone (201) 455-5314

D.W.H. Roth, Jr.
Vice President
Office of Science
and Technology

March 2, 1987

Representative Doug Walgren
Chairman, Science Research and Technology Subcommittee
U.S. House of Representatives
2319 Rayburn Building
Washington, DC 20515

Dear Congressman Walgren:

Your Subcommittee on Science, Research, and Technology shortly will be taking testimony on the proposed privatization of the National Technical Information Service (NTIS). I am Vice President of the Allied-Signal Corporation Office of Science and Technology, having responsibility for technology transfer throughout that corporation. In addition, I am involved with a number of technical data organizations as follows:

Chairman of the Board
    - Materials Properties Council, Inc.
Chairman of the Administrative Committee
    - Design Institute for Physical Property Data
    - American Institute of Chemical Engineers
Member of the Numerical Data Advisory Board
    - National Research Council
Chairman, Evaluation Panel for the NBS
    - Office of Standard Reference Data - National Research Council
Member of the Board
    - National Materials Property Data Network, Inc.

The availability of critically evaluated scientific and technical data provides the general underpinning for almost all of the research, development, and engineering activities carried out in this nation. Without a continuing supply of such information, readily available and accessible to the U.S. scientific community, research programs at our universities would be slowed since new measurements would have to be made to regenerate lost data. Industry's computer assisted design and engineering of new products and processes would be compromised since without access to reliable data, use of large safety factors would result in uneconomical and noncompetitive overdesign of our plants and equipment.

The NTIS is this country's "National Technical Archive" for scientific and technical information. Over 1.6 million documents are stored in machine-readable form with 70,000 more added each year. It is estimated that the technical results of over $400 billion of federally funded R&D resides in this "National Technical Archive". The system serves the country well - and does it on a total expense recovered basis. It is vital that this country have a facility where not only "popular" information is available, but where seldom used information can be recovered when required. I can well conceive of the need in the late 1990's to recover part of the billions of dollars of still valid technical information generated in the 1970's on alternative clean sources of energy from fossil fuels such as coal. Much of this "orphan" data would be lost without a federally mandated technical archival organization.

My principal concerns, and these are generally reflected by other industrial users of NTIS services, are:

1) Loss of the technical archival resource, since a private for profit enterprise has no obligation to inventory slow moving items, or else would charge an amount for such service as to make it economically unavailable to all but the largest corporations.

2) NTIS has forged information links with counterpart national technical data organizations in other countries, including Germany and Japan. These linkages would be weakened if other governments had to deal with a private U.S. enterprise.

3) NTIS has forged information links with other federal agencies such as NASA, DOE, & DOD. Indeed, NTIS recently entered into an agreement with the DOE Office of Scientific and Technical Information organization (OSTI) for management and dissemination of OSTI publications. Dissatisfaction with any selective handling of such information based on profit motivation could well see the dissolution of such linkages – with some of these agencies separately handling their own data dissemination services.

4) Disruption of a national resource which works, including potential loss of key NTIS information specialists to other federal agencies.

U.S. industry has a natural inclination to support privatization of federal functions, since we have an abiding belief that profit motivation will make for efficiency and more effective operations. Whereas this is, in our view, a good generality – it doesn't fit situations involving organizations such as NTIS, or the National Bureau of Standards to cite another example.

The necessary data activities involving generation of critically evaluated standard reference data and dissemination of this and other valuable scientific and technical data would simply not be done with the requisite degree of completeness if direct and immediate monetary profit was the driver.

I encourage you and your Subcommittee to take these factors into account as it makes its recommendations with regard to Congress's position on this matter.

Sincerely,

D.W.H. Roth, Jr.
D.W.H. Roth, Jr.

TEMPLE UNIVERSITY
A Commonwealth University

Office of the Director of Libraries

Central Library System

Samuel Paley Library 017-00
Philadelphia, Pennsylvania 19122

February 19, 1987

The Honorable John Heinz
U.S. Senate
227 Russell Building
Washington, DC 20515

Dear Senator Heinz:

I am deeply concerned about the proposal by OMB, stated in the Appendix (I-F9) to the FY 1988 Budget, that operation of the National Technical Information Service (NTIS) be turned over to the private sector on a contract basis. NTIS has for years been providing efficient, inexpensive document delivery at full cost recovery. It is therefore difficult to see how this proposed change would benefit the public, either as information users or as taxpayers. There are, on the other hand, several potential dangers in the proposed privatization of NTIS.

In the first place, although it is becoming fashionable to think of information as a commodity, we must keep in mind that the information NTIS disseminates is really public property. The research that is reported in NTIS documents is tax-supported. Any move that would tend to restrict public access to those documents--especialy access by other researchers who can make productive use of them--should therefore be resisted.

One expected consequence of privatization is an increase in NTIS prices. This is inevitable, unless the contracting firm can considerably reduce dissemination costs, which is doubtful. More likely, there will be an initial price increase to generate a reasonable profit and additional increases as the vendor adds value to the basic information by reformatting or packaging it in ways that appeal to commercial users. The losers, of course, will be those in the non-profit sector--notably the university and college faculty members and students who use NTIS documents in research, teaching, and study and usually must pay for them from their own pockets.

Longer run consequences of privatization may be even more serious. Reformatting and packaging would justify copyrighting, and the contracting vendor would then have little reason to retain documents in their original, publicly-owned form. Even without copyrighting, it is unlikely that any commercial firm would be as committed as a public agency is to retaining a permanent archive of no larger marketable documents for the sake of future historical research. This problem would be exacerbated by periodic changes from one contracting vendor to another. Under these conditions, furthermore, NTIS would soon lose the confidence and cooperation of both the domestic agencies that now regularly provide documents to NTIS and the foreign governments with whom NTIS has established document dissemination agreements.

I understand that both the House Science and Technology Subcommittee, chaired by Representative Doug Walgren, and the Senate Subcommittee on Science, Technology, and Space, chaired by Senator Donald W. Riegel, may hold hearings to consider this OMB proposal and to explore alternatives. I urge you to encourage examination of the issues and to voice the concerns of librarians and their academic colleagues.

Sincerely yours,

James Myers

James N. Myers
Director of Libraries

JNM/kp

xc: ✓The Honorable Doug Walgren, U.S. House of Representatives
The Honorable Donald W. Riegel, U.S. Senate

carroll of montana

May 7, 1987

The Honorable Doug Walgren, Chairman
Subcommittee on Science, Research, and Technology
ATTN: Mr. James Turner
2319 Rayburn House Office Building
Washington, DC 20515

Dear Mr. Chairman:

With reference to the suggestion that the National Technical Information Service be privatized, the Carroll College Library would like to put itself on record as firmly opposed to this idea.

It is extremely important to our educational and research objectives that this information service remain freely available. We strongly support the American Library Association's Council Document #51.2 adopted 7/2/86 on the collection and dissemination of governmental scientific and technical information.

Sincerely,

Elizabeth Furbush

Elizabeth Furbush
Reference/Documents Librarian

cc: Senator Max Baucus
Senator John Melcher
Congressman Ron Marlenee
Congressman Pat Williams

carroll college • helena, montana 59625 • 406/442-3450

ROBERT A. ROE, New Jersey, CHAIRMAN

GEORGE E. BROWN, JR., California
JAMES H. SCHEUER, New York
MARILYN LLOYD, Tennessee
DOUG WALGREN, Pennsylvania
DAN GLICKMAN, Kansas
HAROLD L. VOLKMER, Missouri
BILL NELSON, Florida
RALPH M. HALL, Texas
DAVE McCURDY, Oklahoma
NORMAN Y. MINETA, California
BUDDY MacKAY, Florida
TIM VALENTINE, North Carolina
ROBERT G. TORRICELLI, New Jersey
RICK BOUCHER, Virginia
TERRY BRUCE, Illinois
RICHARD H. STALLINGS, Idaho
BART GORDON, Tennessee
JAMES A. TRAFICANT, JR., Ohio
JIM CHAPMAN, Texas
LEE H. HAMILTON, Indiana
HENRY J. NOWAK, New York
CARL C. PERKINS, Kentucky
TOM McMILLEN, Maryland
DAVID E. PRICE, North Carolina
DAVID R. NAGLE, Iowa
JIMMY HAYES, Louisiana

U.S. HOUSE OF REPRESENTATIVES

COMMITTEE ON SCIENCE, SPACE,
AND TECHNOLOGY

SUITE 2321 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
(202) 225-6371

MANUEL LUJAN, JR., New Mexico
ROBERT S. WALKER, Pennsylvania
F. JAMES SENSENBRENNER, JR., Wisconsin
CLAUDINE SCHNEIDER, Rhode Island
SHERWOOD L. BOEHLERT, New York
TOM LEWIS, Florida
DON RITTER, Pennsylvania
SID MORRISON, Washington
RON PACKARD, California
ROBERT C. SMITH, New Hampshire
PAUL B. HENRY, Michigan
HARRIS W. FAWELL, Illinois
D. FRENCH SLAUGHTER, JR., Virginia
LAMAR SMITH, Texas
ERNEST L. KONNYU, California
JACK BUECHNER, Missouri
JOEL HEFLEY, Colorado
CONSTANCE A. MORELLA, Maryland

HAROLD P. HANSON
Executive Director
ROBERT C. KETCHAM
General Counsel
R. THOMAS WEIMER
Republican Staff Director

March 16, 1987

Dr. Joseph Caponio, Director
National Technical Information Service
5285 Port Royal Road
Springfield, Virginia 22161

Dear Dr. Caponio:

On behalf of the Science, Research and Technology Subcommittee, we would like to thank you for your testimony at the March 4, 1987 hearing on the Administration's proposed privatization of NTIS.

As a follow-up to that hearing, enclosed are some additional questions to be answered. In view of the importance of this issue, we would like to have as complete a hearing record as possible. Please make every effort to respond by March 23, 1987 so that we may have the benefit of this additional information in time for Subcommittee markup.

Sincerely,

Doug Walgren
DOUG WALGREN, Chairman
Subcommittee on Science,
Research and Technology

Sherry Boehlert
SHERWOOD L. BOEHLERT
Ranking Minority Member

DW/Peg
Enclosure

QUESTIONS
NTIS HEARING

1. What form is the NTIS privatization likely to take? What legal authority do you plan to use for privatization? How do you currently plan to keep Congress informed in advance of planned privatization actions?

2. What is the true reason that the government wants to privatize NTIS?

   Is there an overwhelming benefit that is not readily apparent on the surface?

3. Do any of NTIS' current customers feel they would be served better by a private NTIS?

4. What has been the reaction of each of the federal agencies to supplying information to a private NTIS? Particularly the Intelligence Agency?

5. How will the many concerns raised by NTIS' customers, and the government agencies with which it works, be addressed? Do you plan to survey in the near future the signatories to the many agreements under which NTIS receives publications to make sure they would continue to supply documents if NTIS becomes a private entity?

6. Twenty-five percent of the documents that NTIS acquires are of foreign origin. What will happen to the foreign agreements under which these documents are acquired under the privatization proposal?

7. Have you asked the foreign governments, such as Japan, which have insisted on government to government dealings in scientific and technical information, if they will continue to supply documents under these agreements if a private company steps into NTIS' role with the intention of making a profit on resale?

8. Do you know of any private-sector companies which are willing to perform current NTIS services in their entirety?

9. At least two states have proposed creation of a National Technical Library to take over many of the function of NTIS.

   Does the Administration have a position on this type of proposal?

10. What is the National Technology Center proposal and how does it relate to NTIS?

11. Will those portions of NTIS, which do not pay their own way, and which are not of interest to NTIS' private-sector successor be picked up elsewhere by the government?

    If not, how does this square with the Administration's commitment to increase technology transfer to the private sector, as evidenced by President Reagan's competitiveness message?

12. Certain firms in the private sector already make profits from remarketing NTIS publications. Will privatization of NTIS hurt these firms?

13. It has been estimated that there will be a 50 percent reduction of information into the NTIS system if it goes private. Do you know the basis for this estimate?

14. What steps are being taken to make sure that the archived publications of NTIS remain available at a reasonable price?

15. Do the privatization initiatives extend to the patenting, licensing, and CUFT operations of NTIS?

    If not, what will happen to these operations?

16. NTIS has been assigned the lead role by Secretary Baldrige to coordinate the DOC response under the Japanese Technical Literature Act. What effect would the privatization of NTIS have upon implementation of that Act?

17. Will NTIS privatization have any effect on the receipt of free materials and services from NTIS by the depository libraries?

18. Have you considered establishing NTIS as a government corporation, or as a government-owned, contractor-operated operation?

19. This is the fifth attempt to privatize NTIS in a relatively short time period, despite the fact that the Grace Commission Report specifically states that the NTIS data base should be expanded and strengthened, and no mention is made of privatization of NTIS. How does the Administration justify the money spent on repeatedly examining this question, when NTIS last year actually made a $4 million profit last year for the government?

20. Can you point to any changed circumstances since the A-76 competitions, which showed NTIS' current employees to be those which could provide NTIS services at the lowest cost?

21. The Department of Commerce's privatization proposal, dated October 1986, estimates that up to $21 million will be required for employees termination and settlement of deposit accounts and other liabilities. Approximately $700 thousand will be required because of the loss of interest-free deposit account monies, and $7 million in NTIS service/use payments to Commerce and other agencies will need to be made up. What legal authority will be

used to incur these costs?

22. Do you anticipate the government having to provide any start-up costs to private contractor, or private-sector owner of NTIS?

23. What effect do you expect privatization to have on NTIS prices?

24. Assuming the worst, that there is a big fall-off in publications going to NTIS, and that the private sector NTIS goes bankrupt, will the Commerce Department be willing to step in and recreate a public NTIS?

25. What conflict of interest provisions do you expect to be included in the privatization contract, if a U.S. company takes over NTIS?

26. What steps are being taken to limit the possibility of NTIS ending up under foreign control, either through a foreign company winning the competition for NTIS, or the private sector successor to NTIS subsequently being acquired by a foreign company.

27. If another company takes over a private NTIS either through a hostile merger or after a bankruptcy, what will prevent that company from discontinuing all but the most profitable NTIS operations or raising prices dramatically?

28. Were improvements identified in the course of your study, which can be implemented short of privatization?

ANSWERS

FINAL 4/27/87

QUESTION:

What form is NTIS privatization likely to take? What legal authority do you plan to use for privatization? How do you currently plan to keep Congress informed in advance of planned privatization actions?

ANSWER:

Privatization would likely take the form of a contract with a private concern and come to include creation of an employee stock ownership plan (ESOP). The Administration has established staff working groups to review the available options and to recommend the most appropriate approach. The working groups will also address a variety of pertinent issues, such as the continued availability of Government agencies' materials and the disposition of the existing deposit accounts. The Administration will keep the Congress informed.

Since the mid 1950's, it has been Federal policy that the Government should not compete with its citizens. The Government's proper role is to perform functions which are truly public in nature. NTIS was created to fill a market void, to get technical reports from Government agencies to the private sector. The Administration now wishes to determine whether, with the increased development of the information industry and advances in the use of computers of all types, NTIS is still filling a market void or whether it does, indeed, compete directly with the private sector. To this end, the Administration is assessing a contract option -- with the private sector fulfilling the clearinghouse functions and the Government retaining overall policy direction.

The 1986 Tax Reform Act went a long way towards steering the business community into employee stock ownership plans. The ESOP has proved an excellent tool for making failing businesses profitable (Wierton Steel) as well as making successful businesses (Gortex) even more lucrative. The Administration program for ESOPs (FED-COOP) achieves the benefits of contracting out without damaging the interests of the affected employees. NTIS is being looked at as a model for the Government ESOP program.

QUESTION:

What is the true reason that the Government wants to privatize NTIS? Is there an overwhelming benefit that is not readily apparent on the surface?

ANSWER:

NTIS was created at the end of World War II because of a "market failure" in getting the information in technical Government studies out to the private sector. Overall, it has been a success. By the mid-1970's, NTIS had become self-supporting. Last year, Fiscal Year 1986, NTIS operations, not including income passed along to the Treasury from patent licenses, showed a profit of $768,000.

The overall situation has changed, however. As the use of computers has grown enormously within the business world, sophisticated, private sector, information users and suppliers have moved along with the trend. The key issue is whether new information sources have now closed the "market gap." If the market void is filled , we need to determine whether NTIS hampers or augments the development of sophisticated technical products.

It is important to note that the NTIS workloads have been dropping steadily in this decade. Only through price increases has NTIS been able to keep up with its costs. This gives credence to the idea that the NTIS system needs to be carefully examined and perhaps revamped.

QUESTION:

Do any of NTIS' current customers feel they would be served better by a private NTIS?

ANSWER:

The Department attempted to answer that question that summer by requesting comments in a Federal Register notice. While virtually all responses were against selling NTIS or relinquishing Government responsibility for NTIS, the responses came predominantly from the library community which constitutes only 7 percent of NTIS sales.

QUESTION:

What has been the reaction of each of the Federal agencies to supplying information to a private NTIS? Particularly the Intelligence Agency?

ANSWER:

NTIS has distributed technical studies for Federal agencies, such as Energy and Defense, in a highly satisfactory manner. We have not surveyed the agencies, but believe, on the basis of some comments, that these agencies would want to be assured that, in the new arrangement, the same care would be taken in distribution. Identifying the best means for providing this assurance is one of the tasks of the staff working groups.

As for the intelligence agencies, NTIS distributes only items which have cleared the intelligence agencies' own controls and which are not classified. Although we have not polled the contributing agencies, we believe that contract provisions could assure a continued inventory The staff working groups will address this concern.

QUESTION:

How will the many concerns raised by NTIS customers, and the Government agencies with which it works be addressed? Do you plan to survey in the near future the signatories to the many agreements under which NTIS receives publications to make sure they would continue to supply documents if NTIS becomes a private entity?

ANSWER:

The signatories to the agreements have a vested interest in NTIS. If NTIS does not distribute their documents, they would have to assume that responsibility. Therefore, we feel they will work with us. The Administration recognizes this is an important issue and will do everything possible to ensure that the needs and concerns of the NTIS customers and source agencies are addressed. The Administration has every intention of maintaining continuous availability.

QUESTION:

Twenty-five percent of the documents that NTIS acquires are of foreign origin. What will happen to the foreign agreements under which these documents are acquired under the privatization proposal?

ANSWER:

Since foreign materials are contributed to NTIS on a voluntary basis, the Administration sees no reason why these agreements would not remain in force. It may be that Commerce would continue to negotiate these agreements.

QUESTION:

Have you asked the foreign Governments, such as Japan, which have insisted on Government dealings in scientific and technical information, if they will continue to supply documents under these agreements if a private company steps into NTIS' role with the intention of making a profit on resale?

ANSWER:

The Administration's intent is to keep the policy questions within Commerce's control. If the decision is to privatize through a contract with a private firm and the Japanese do not wish to continue to provide documents directly, a residual staff in Commerce may be able to facilitate the transaction.

QUESTION:

Do you know of any private-sector companies which are willing to perform current NTIS services in their entirety?

ANSWER:

Several firms have indicated interest. With revenue in excess of $20 million a year, NTIS is a good-sized small business. We will explore all possibilities through a "sources sought."

QUESTION:

At least two States have proposed creation of a National Technical Library to take over many of the functions of NTIS. Does the Administration have a position on this type of proposal?

ANSWER:

The Administration would be pleased with any State effort to improve distribution of technical information to the private sector. In a sense, this points back to the central issue: Is NTIS still relevant to the needs of today's sophisticated information users?

QUESTION:

What is the National Technology Center proposal and how does it relate to NTIS?

ANSWER:

The proposal appears to be for something similar to a National Library of Medicine, only for technology. This proposed center would presumably include NTIS as the technical report literature collection and public dissemination arm.

If a detailed proposal is developed, the Administration will provide a fuller commentary.

QUESTION:

Will those portions of NTIS which do not pay their own way, and which are not of interest to NTIS' private-sector successor be picked up elsewhere by the Government? If not, how does this square with the Administration's commitment to increase technology transfer to the private sector, as evidenced by President Reagan's competitiveness message?

ANSWER:

Whether privatized or not, the answer is the same. NTIS operates in a business environment. NTIS is constantly introducing, upgrading, and scaling back its product line. It has some new products which are successful immediately, some which need a long incubation period, and some which fail. It faces the same business decisions as everyone else when attempting to identify demand and can never be totally certain that the time has come to discontinue a product. This decision is as difficult for NTIS as it would be for a successor. In short, this is a process which will go on regardless of the form NTIS takes.

QUESTION:

Certain firms in the private sector already make profits from remarketing NTIS publications. Will privatization hurt these firms?

ANSWER:

The intent is to determine whether there is a better way to get technical information to the private sector. Whether this will impose constraints on remarketeers will not be known until the issue is reviewed by the staff working groups.

QUESTION:

It has been estimated that there will be a 50 percent reduction of information into the NTIS system if it goes private. Do you know the basis for this estimate?

ANSWER:

Since over 60 percent of NTIS information comes from two sources and 80 percent from four sources, it would seem that this is a concern that the staff working groups will be able to resolve.

QUESTION:

What steps are being taken to make sure that the archived publications of NTIS remain available at a reasonable price?

ANSWER:

The issues of price and availability for all documents are being addressed by the staff working groups; one motive for Government retention of policy direction is continued availability at reasonable prices.

QUESTION:

Do the privatization initiatives extend to the patenting, licensing and CUFT operations of NTIS? If not, what will happen to these.

ANSWER:

The Federal Technology Act of 1986 provides that each agency can conduct its own patent licensing program. Agencies are also free to employ NTIS for this purpose, as several do. Agencies could continue to use its services or make other arrangements, including using other private firms.

It should be noted that these functions involve only 13 of 335 NTIS employees.

QUESTION:

NTIS has been assigned the lead role by Secretary Baldrige to coordinate the DOC response under the Japanese Technical Literature Act What effects would the privatization of NTIS have on the implementation of the Act?

ANSWER:

Although NTIS plays an important role in the implementation of the Act, it is the responsibility of the Under Secretary for Economic Affairs to coordinate the Department's implementation of the Act. The Patent and Trademark Office, the International Trade Administration, the National Bureau of Standards, and the National Technical Information Service all carry out functions covered by the Act, spending over $2 million on related activities.

QUESTION:

Will NTIS privatization have any effect on the receipt of free materials and services from NTIS by the depository libraries?

ANSWER:

As before, all materials would be provided to the depositary libraries.

QUESTION:

Have you considered establishing NTIS as a Government corporation, or as a Government-owned, contractor-operated operation?

ANSWER:

We are aware of the National Academy of Public Administration's recent report on this subject and will assess its applicability to privatization.

QUESTION:

This is the fifth attempt to privatize NTIS in a relatively short time period, despite the fact that the Grace commission Report specifically states that the NTIS data base should be expended and strengthened, and no mention is made of the privatization of NTIS. How does the Administration justify the money spent on repeatedly examining this question, when NTIS actually made a $4 million profit last year for the Government?

ANSWER:

The issue of privatization is whether or not the Government is performing functions which compete with the private sector. There is nothing uniquely public about the operation of a clearinghouse for technical information. NTIS is, therefore, an appropriate subject for a careful review of privatization options. For the record, NTIS' profit last year was $768,000; the $4 million represents revenues for patent licensing returned to the Treasury.

QUESTION:

Can you point to any changed circumstances since the A-76 competitions which showed NTIS current employees to be those which could provide NTIS services at the lowest cost?

ANSWER:

No, but the FED-COOP program may offer those same employees even greater opportunities to provide NTIS services in the private sector and to receive a share of the profit for being efficient.

QUESTION:

The Department of Commerce's privatization proposal, dated October 1986, estimates that up to $21 million will be required for employee's termination and settlement of deposit accounts and other liabilities. Approximately $700 thousand will be required because of the interest-free deposit account monies, and

$7 million in NTIS service/use payments to Commerce and other agencies will need to be made up. What legal authority will be used to incur these costs?

ANSWER:

The $21 million was a worst case scenario. These numbers are being reviewed by the staff working group in light of the contract proposal. The final decision will have to take total costs into account and appropriations and authorizations requested as necessary. Under an employee-owned option, this number could drop considerably.

QUESTION:

Do you anticipate the Government having to provide any start-up costs to a private contractor, or private-sector owner of NTIS?

ANSWER:

The Administration does not expect that the final proposal will include start-up costs.

QUESTION:

What effects do you expect privatization will have on NTIS prices?

ANSWER:

There should not be much movement either way. The staff working groups will address the issue of contractor prices.

QUESTION:

Assuming the worst, that there is a big fall-off in publications going to NTIS, and that the private-sector NTIS goes bankrupt, will the Commerce Department be willing to step in and recreate a public NTIS?

ANSWER:

There should not be a big fall-off in publications since the staff working groups have been tasked with resolving this before making a final recommendation.

In any case, the Department will monitor the contract and if the initial contractor fails to perform, it will seek another contractor.

QUESTION:

What conflict of interest provisions do you expect to be included in the privatization contract, if a U.S. company takes over NTIS?

ANSWER:

None. The Government will still exercise policy oversight over contractor activities.

QUESTION:

What steps are being taken to limit the possibility of NTIS ending up under foreign control, either through a foreign company winning the competition for NTIS or through the private-sector successor to NTIS subsequently being acquired by a foreign company?

ANSWER:

This will be minimized by the policy oversight which the Department will maintain. Again, the staff working group is addressing the issue.

QUESTION:

If another company takes over NTIS either through a hostile merger or after a bankruptcy, what will prevent the company from discontinuing all but the most profitable NTIS operations or raising prices dramatically?

ANSWER:

Commerce will not surrender control of policy issues. If no private firm could meet the contract provisions (availability and reasonable prices), then we would necessarily need to rethink this approach to fulfilling NTIS' mission.

The biggest barrier might be the nature of NTIS. It would be hard to discontinue specific areas when the average document sells fewer than 10 copies.

QUESTION:

Were improvements identified in the course of your study which can be implemented short of privatization?

ANSWER:

A major recommendation of the study was expanding NTIS partnership activities with the private sector, particularly working more closely with the private sector to develop and improve NTIS-based products and services.

U.S. HOUSE OF REPRESENTATIVES

COMMITTEE ON SCIENCE, SPACE,
AND TECHNOLOGY

SUITE 2321 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
(202) 225-6371

May 21, 1987

Mr. David Nathan
Deputy Assistant Secretary
Department of Commerce
Washington, DC

Dear Mr. Nathan:

Thank you very much for your response to the Subcommittee's questions on the Administration plans regarding the National Technical Information Service (NTIS). Your answers are helpful in our attempts to understand the Administration's position. We believe that the Department currently does not have the statutory authority to contract out NTIS's functions either through an ESOP or by other means. We note that our question on the Department's statutory justification for privatization was not answered. We expect to be informed well in advance of actions in furtherance of privatization of this agency. We also would like to know what percentage of NTIS's current employees are eligible for retirement or have the right to transfer to other jobs in the Department should an NTIS ESOP be formed.

In your responses, you draw a distinction between NTIS and the Department's patent licensing program. Section 9 of the Federal Technology Transfer Act of 1986 abolished CUFT and made CUFT's licensing program a statutory part of NTIS effective October 1986. We feel NTIS is the appropriate place for CUFT responsibilities to remain. In drafting the Federal Technology Transfer Act, we had no intent to disperse CUFT functions to the various agencies. This would result in wasteful duplication of effort, especially involving foreign licensing of inventions. While the Act permits other agencies to license their own inventions, Section 14(a)(4) of the Stevenson-Wydler Act which became law as part of the Federal Technology Transfer Act was included to ensure the continuation of the Department's patent licensing program; in its present form. We request a briefing if the Department does not intend to carry out this provision.

Mr. David Nathan
May 21, 1987
Page 2

We expect to have hearings on Federal Information Policy the week of June 23rd. We will use these hearings as an opportunity to explore the questions we raised which remain only partially answered and to balance the goal of modernizing NTIS with our mutual desires to continue affordable permanent availability of NTIS documents at prices, to increase NTIS's affectiveness in technology transfer, to improve bibliographic tools, to increase availability through NTIS of scientific and technical information, and to continue NTIS participation in the Depository Library Program.

Sincerely,

Doug Walgren

DOUG WALGREN, Chairman
Subcommittee on Science,
Research and Technology

DW/Teg

NATIONAL RESEARCH COUNCIL
COMMISSION ON PHYSICAL SCIENCES, MATHEMATICS, AND RESOURCES
2101 Constitution Avenue Washington, D.C. 20418

NUMERICAL DATA ADVISORY BOARD

April 30, 1987

Representative Doug Walgren
Chairman, Science, Research &
 Technology Subcommittee
2319 Rayburn House Office Bldg.
Washington, DC 20515

Dear Mr. Walgren:

The Numerical Data Advisory Board is an interdisciplinary board of the National Academy of Sciences-National Research Council whose objective is improvement in the quality, credibility, availability, accessibility, dissemination, utilization and management of scientific and technical data.

The Board has serious concerns about the proposed "privatization" or "contracting out" of the National Technical Information Service (NTIS). Delegation of these responsibilities to a profit making company could damage attributes of NTIS that are of high value to the scientific and technological community. The basis of the Board's concerns are described in detail in the attachment.

The basic values of NTIS are in the broad base of its sources, foreign as well as domestic, established over many years, resulting in the present comprehensiveness of its collections--1.6 million documents with 70,000 added annually in a single government repository. These documents are readily accessible to a variety of users at reasonable cost.

The Board is apprehensive as to whether a profit-oriented company would be willing to archive reports for which there is a low demand and whether their cost-based charges for such reports would be prohibitive. The current willingness of government research contractors and foreign governments (especially Japan) to submit reports to NTIS might also be adversely affected.

There are apparently no compelling financial reasons for the proposed "privatization" or "contracting out" of NTIS: the current legislation requires NTIS to have full cost recovery, which has been achieved while maintaining reasonable costs to the user community. However, the Board's concerns would not rule out transferring the responsibilities of NTIS to a non-profit organization experienced in the archiving, accessing, and dissemination of scientific and technical information.

The National Research Council is the principal operating agency of the National Academy of Sciences and the National Academy of Engineering to serve government and other organizations

The Board has voted unanimously to take a strong stand to ensure the continued availability of this important resource to the scientific and technological community.

Sincerely,

Gerd M. Rosenblatt
Chairman

Enclosures

NDAB's CONCERNS REGARDING PROPOSED "PRIVATIZATION" of NTIS:

Scientists and engineers are fundamentally involved with the creation and exchange of technical information. For them to do their jobs requires an uninterrupted steady stream of information. This need is best served by a single, national, comprehensive, easily accessible resource that can provide hard copy documents and on-line access to databases at reasonable cost in reasonable time, with little user learning required.

A substantial fraction of research is funded by the federal government, which makes available to the public all non-sensitive, non-classified information generated at public expense. Currently, most major agencies depend on NTIS to serve on their behalf both to disseminate newly generated information and to store and retrieve previously generated information. The scientific and engineering communities have come to depend on NTIS as a national focus for access to information and data generated by geographically distributed agencies with a wide variety of subject coverage.

The system now serves the needs well. In recent years, NTIS has managed to increase its image as the national resource of government reports of scientific and technical content. It has increased the flow of information from other nations, notably Japan and Germany (in total, some 90 foreign sources). It deals with information from some 50 agencies. It achieves this at affordable cost to the user and none to the taxpayer. Thus, NTIS now helps federal government agencies fulfill their obligation to the public for technical reports and a large store of invaluable critical data compilations and reference materials with long-lasting value.

The proposal to privatize NTIS raises the following concerns for the scientific and engineering communities regarding the flow of scientific and technical information:

1. Loss of archival resource. Maintenance of a complete file of technical documents in accessible form cannot be justified on a sales-volume basis, yet can be crucial to advance research. For example, some research subjects during the energy-crisis years will be revisited when oil prices once more rise (some good-quality alternative energy technology reports are now more than 10 years old). Recent NTIS queries show interest in documents on nuclear reactors and radiation safety and education, some more than 25 years old. Archival data are also essential for disciplines studying time-dependent phenomena measured in the earth and atmosphere (e.g., seismic events, weather, chemicals in the environment).

2. Reduced on-going coverage. Certain coverage and services may be dropped, such as (a) some bilateral international information exchange agreements that are not profitable on a direct sales-accounting basis; (b) agencies engaged in potentially sensitive or classified work may cut off existing bibliography exchange agreements; (c) high-tech but low-volume technical material may be dropped or covered only partially.

3. Interrupted flow of information. During a transition there will undoubtedly be a learning period as the new company(ies) achieve efficiency, and some information will be lost or not transferred on time.

Private companies now earn approximately $11M through marketing NTIS information in areas of popular interest. Insofar as high-volume sales are not a general feature of specialized R&D reports, their price may be increased after privatization with concomitant reduction in sales and reduced information flow. Alternatively, the government might have to subsidize the dissemination of certain technical data, without which our nation cannot sustain economic competitiveness. NTIS now achieves this same function without federal subsidy.

Special
Libraries
Association

1700 Eighteenth Street, N.W. Washington, DC 20009

202/234-4700

STATEMENT OF
SPECIAL LIBRARIES ASSOCIATION
BEFORE THE
HOUSE SUBCOMMITTEE ON
SCIENCE, RESEARCH AND TECHNOLOGY
THE FUTURE OF THE
NATIONAL TECHNICAL INFORMATION SERVICE
MARCH 4, 1987

Frank Spaulding, President, SLA
AT&T Bell Laboratories

Thank you, Mr. Chairman and members of the Subcommittee for this opportunity to present the views of the Special Libraries Association. I am Frank Spaulding, Manager, Business Development Library Network, AT & T Bell Laboratories in Holmdel, New Jersey. The other hat I am proud to wear at the moment is as President of SLA.

The Special Libraries Association is an international organization of more than 12,500 librarians, information managers, and brokers. Special libraries serve industry, business, research, educational and technical agencies, government, special departments of public and university libraries, newspaper, museums and other organizations both in for-profit and not-for-profit sectors, requiring specialized information. The Association and its members are concerned with the advancement and improvement of communications and the dissemination and ultimate use of information and knowledge for the general welfare of all users.

As you can see, our membership is quite diverse. The business community is well represented by SLA. According to a recent survey conducted by the Association, nearly 50% of our members are in corporate settings. But, I can speak for the membership in academic, nonprofit, and government environments as well when I voice concern over the proposed privatization of the National Technical Information Service.

In June of 1986, we offered our comments in response to a Federal

Register notice on "The Study of Alternatives for Privatization of the National Technical Information Service." We noted, emphatically, that "the NTIS operation works now." We are chagrined that despite an overwhelming negative response to this notice in the Federal Register and despite the recommendation made by a Department of Commerce task force to study this plan that NTIS not be privatized, the President's fiscal year 1988 budget states:

> "In 1988, the private sector will be offered the opportunity to operate NTIS on contract, with the government retaining overall policy direction."

In remarks made during the 15th Annual Financial Management Conference last year, James C. Miller, Director of the Office of Management and Budget noted:

> President Reagan has brought a business-like approach to the administration of the Executive branch. He knows that leadership implies good management, as well as good policies. And that it is good management that gets us to our "bottom line" -- effective government within a balanced budget.

We would certainly agree with this statement. But we hasten to add that NTIS is a good operation; a good business -- it has been run effectively and efficiently. We are not convinced that drastic change is in order.

AT & T Bell Labs is counted among NTIS's regular customers, which also includes IBM and General Electric. In addition, approximately 75% of the customers served directly by NTIS are small businesses. And indirectly, public and university libraries serve many more small businesses. Interestingly, at a time when the Administration is touting American competitiveness, it is attempting to place roadblocks in front of this nation's business community. Fair and impartial release of scientific and technical information is vital to our country's competitiveness in the world market.

SLA and its members certainly approve of a free enterprise system. This, of course, means competition in the marketplace. As a "worst case scenario", what if a private contractor, operating all of NTIS functions, chose to limit access of other firms to the available information through pricing, marketing, or delays in delivery? We would hate to see any form of "insider trading" rear its ugly head in the field of scientific and technical research.

By statute, NTIS is a self-supporting agency. With the exception of $500,000 appropriated for its patent licensing program, all NTIS activities are funded through the sale of its products and services. Its annual sales revenues amount to nearly $22 million. This certainly does not sound like a government function that needs such a drastic overhaul. If any thing, the current Administration should point to the NTIS operation with pride and allow it to continue functioning as is.

The legislative history of NTIS also supports the position that this central clearinghouse for scientific and technical information should be readily available to the general public and the business community. Further, this legislative history supports the premise that contracting out or privatizing NTIS cannot be accomplished without Congressional approval. Title 15 of the United States Code, Section 1152, directs the Secretary of Commerce to "establish and maintain within the Department of Commerce, a clearinghouse for the collection and dissemination of scientific, technical, and engineering information." Contracting out any or all of these functions certainly does not seem to be within the letter or intent of the law.

In its statement of purpose, NTIS is seen as,

> . . . a self-supporting information service organization. It channels information about technological innovations and other specialized information to business, educators, government, and the public. Its products and services are intended to increase the efficiency and effectiveness of the U.S. research and development, to support U.S. foreign policy goals by stimulating economic growth of developing nations, and to increase the availability of foreign technical information in the United States.

At a time when the current Administration is concerned about the adverse impact of technology transfer and the sensitivity of government information, it is ironic that is is considering contracting out an agency which stores and disseminates so much of this information. Who can say that a particular private enterprise is not, in some way, connected to foreign interests? Dr. David Bender, SLA Executive Director, raised this point in our June statement, which is attached to this testimony, noting, "If NTIS were sold, be it to one or several entities, regard must be given to the company or companies involved. What if a foreign concern were involved?" And as for the issue of security, we stated:

> The government has a significant stake in maintaining the security of information collected by NTIS. Government information is an essential tool for managing the government's operations, for providing the basis for sound business decisions in the private sector, for providing citizens with knowledge of their society and is a resource whose value -- economic, social, and personal -- is intangible. It is a resource which is necessary for the management of all other tangible resources.

One of the options suggested in the April, 1986 Federal Register notice was that NTIS become a public or quasi-public corporation. SLA stated that the idea, " . . . has merit and is worth studying. It would allow continued government control over national security and defense information and could keep the price structure reasonable." We noted that one of the 130 or so responses to the notice came from two staff members of the Science and Technology Committee and stated their support for the "suggestion that a re-configuring of NTIS as a government corporation be considered . . . " They went on to say that "some version of a government corporation could be devised which would enable NTIS to retain the government mandate and legitimacy it needs to deal with other governments and to distribute fairly valuable government information while at the same time giving it the control it needs over its own operations."

In July of 1986, NTIS convened a public workshop to discuss the various options available for the future operation of the agency. When the idea of establishing NTIS as a corporation was discussed, SLA's Director of Government Relations and Fund Development, Sandy Morton, raised a number of points as to the role of NTIS "in terms of disseminating information, especially for the depository libraries. Would that whole concept change if it became a corporation?" Certainly, with any new idea, a variety of questions and concerns must be addressed. And in this case, our members would want to be assured that their support for a corporation would not, in the end, have an adverse impact on their good working relationship with NTIS. But if the Administration is unwilling to let the agency remain as is, we at SLA view the establishment of a corporation preferable to that of turning it over to the private sector, which offers few, if any, guarantees.

As a professional information specialist in a large corporation, I can state that my colleagues and I at AT & T Bell Laboratories have made extensive use of and have been satisfied with the services offered by NTIS over the years. As a spokesperson for SLA, I add our voice to the chorus of those disapproving of any attempt to contract out or to privatize NTIS.

Special
Libraries
Association

1700 Eighteenth Street, N.W. Washington, DC 20009

202/234-4700

June 2, 1986

Assistant Secretary for Productivity,
  Technology and Innovation
c/o Mr. Joseph Clark
Room 4824
U.S. Department of Commerce
Washington, D.C. 20230

Dear Mr. Clark:

Enclosed is a statement prepared by the Special Libraries Association in response to the Department of Commerce's solicitation of public comment about the alternatives being studied to privatize the National Technical Information Service.

Open and continued access to government information is a primary concern of the Special Libraries Association and its members. We would not want to see any changes in the operation of NTIS which would threaten such access.

With best wishes, I remain,

Cordially,

David Bender
David R. Bender, Ph.D.
Executive Director

DRB/kag

Special
Libraries
Association

1700 Eighteenth Street, N.W. Washington, DC 20009

202/234-4700

Statement of the
SPECIAL LIBRARIES ASSOCIATION
on the
Department of Commerce
Solicitation of Public Comment
on the Study of Alternatives for Privatizing
the
National Technical Information Service

June 2, 1986

David R. Bender, Ph.D.
Executive Director
Special Libraries Association
1700 18th Street, N.W.
Washington, D.C. 20009

The Special Libraries Association is an international organization of more than 12,500 librarians, information managers, and brokers. Special libraries serve industry, business, research, educational and technical agencies, government, special departments of public and university libraries, newspaper, museums and other organizations both in for-profit and not-for-profit sectors, requiring specialized information. The Association and its members are concerned with the advancement and improvement of communications and the dissemination and ultimate use of information and knowledge for the general welfare of all users.

Our Association appreciates this opportunity for those of us in the library and information community to discuss the proposal to privatize the National Technical Information Service. We commend NTIS for soliciting public comments and trust that there will be public hearings. The Special Libraries Association would like to participate in such a forum.

We submit the following specific comments in response to the "Privatization Issues" and "Privatization Alternatives" posed in the Federal Register of April 28, 1986.

Comments Relating to Privatization Issues

1. The NTIS operation works now, even though federal agencies are not obligated to place their reports in the system. Users tend to agree that the information available through NTIS is adequate. Any legislation to compel agencies to place their reports with a privatized NTIS would be met with great opposition and viewed as another example of over-regulation by the federal government.

2. NTIS manages a number of special programs which are best handled by the federal government, such as licensing of government patents and negotiating with foreign sources for the exchange of technical information. The role of the government in these instances cannot be minimized and must continue. A private entity would not have the type of access to foreign sources that the federal government does.

3. The concept of having some NTIS functions partially performed is not realistic and could lead to a duplication of efforts.

4. The federal government's role in maintaining a permanent collection at NTIS must continue. There has to be available scientific and technical data in order for users to track research and progress. Without access to past studies and reports, researchers may be left to "reinvent the wheel."

5. Copyright protection should not be conferred to any private entity for information which has been generated by government funds. Literature paid for by government funds is in the public domain.

This principle must be protected and continued.

6. The prerogative of agencies to make the initial distribution of reports is an important link in the flow of scientific information. The source agency should continue this practice regardless of whether NTIS is privatized or not.

7. If NTIS were sold, be it to one or several entities, regard must be given to the company or companies involved. What if a foreign concern were involved? In addition, the government must be able to regulate the price scales for the cost of documents as well as access and distribution.

8. One reason NTIS has operated a successful program is that it has served as a one-stop source for government information. Users are satisfied with the available services. It should continue to serve as the nation's major source point for the acquisition and dissemination of goverment research and development reports.

9 In many cases a library, which purchases a document from NTIS, is not necessarily the end-user. Specifically, the D.H. Hill Library at North Carolina State University disseminates reports it obtains from NTIS to its borrowing community including private research facilities, research institutions, federal government agencies as well as students and faculty on the campus.

10. The government has a siginificant stake in maintaining the security of information collected by NTIS. Government information is an essential tool for managing the government's operations, for providing the basis for sound business decisions in the private sector, for providing citizens with knowledge of their society and is a resource whose value -- economic, social and personal -- is intangible. It is a resource which is necessary for the management of all other tangible resources.

Comments Relating to Privatization Alternatives

1&2. The Special Libraries Association rejects outright the proposal to privatize all of NTIS' functions. We, therefore, cannot support the first two alternatives.

3. If some portions of NTIS are sold, there must be certain safeguards by the government to ensure continued user access to information or threats to national security.

4. We would prefer keeping NTIS intact. However, the option of contracting out some functions is preferable to its outright sale.

5. The option of a public or quasi-public corporation has merit and is worth studying. It would allow continued

government control over national security and defense information, and could keep the price structure reasonable.

Additional Issues

1. Since the most expensive aspect of information--its creation or collection--is accomplished with public money, the public should continue to have access to this information through the statutorily mandated depository library program. Special libraries rely on the current dissemination framework which ensures equal access to government data, especially through depository libraries.

   Should NTIS be privatized, what obligation would there be to deposit copies of government publications in depository libraries?

2. NTIS now serves as a coordinator for cooperative efforts among the major technical reports processing agencies such as NASA, DOE and sometimes GPO, to standardize input, share resources and in many cases, reduce costs to the government by announcing processing and distributing government publications. This function should continue.

3. The application of user charges or higher prices by the private sector to recover the costs of disseminating government information must be evaluated carefully. Otherwise, a basic right of the nation's citizens to be informed will be violated. Additionally, there is the argument that the public has paid for the government information by their tax dollars.

4. NTIS currently operates the Federal Research in Progress (FEDRIP) Program. It is vital that this function continue under NTIS auspices to ensure continuity and user accessibility.

* * * * * * * * * * *

The value of government information to the government is not solely a function of the degree to which it contributes to achieving a specific agency's mission. Rather, government information is essential for making sound decisions to enhance the quality of life of the nation as well as to strengthen its economic structure and its national defense. The government also has a responsibility for maintaining a recorded history of this nation's progress and accomplishments.

UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Administration
Washington D.C. 20230

APR 28 1987

Dear Jim,

I appreciate having the chance to meet with you on March 31 to discuss options being discussed regarding the National Technical Information Service. I've enclosed a brief article on the FED Co-Op Plan, which is one of the alternatives we're reviewing. There are a number of issues we need to settle. But I think the idea has merit and I hope you'll give us the opportunity to fully explore it.

One area that I may not have been clear on at the meeting deserves mention. It is the unanimous opinion of our group that the NTIS collection is the property of the government and should remain so. The acquisition function from other government agencies and from foreign sources could be continued by the government -- at the private firm's cost. However, it would also be feasible for the contractor to assume that responsibility as an agent of the government with agent duties, responsibilities, and limitations carefully set out in a contract.

I look forward to talking to you again next month when our options have been fully reviewed.

Sincerely,

Alan P. Balutis

Alan P. Balutis
Director, Office of Management
and Organization

Enclosure

Federal Employee Direct Corporate Ownership Opportunity Plan (FED CO-OP):

An Alternative Contracting Out Approach

> "The American dream always has been to have a piece of the action. Income, you know, results from only two things. It can result from capital or it can result from labor. If the worker begins getting his income from both sources at once, he has a real stake in increasing production and increasing output. One such plan is based on financing future expansion in such a way as to create stock ownership for employees."
>
> *R. Reagan, July 1974*

United States
Office of
Personnel
Management

July 1986

Federal Employee Direct Corporate Ownership Opportunity Plan (FED CO-OP):

An Alternative Contracting Out Approach

Privatizing the government's commercial activities provides a major opportunity to reduce the size of the federal budget and restore the federal government to its appropriate role in the marketplace. Whether we are referring to the outright sale of functions such as power marketing administrations or to the contracting out of support services such as federal laundry operations, the potential benefits of privatization for America's taxpayers are ready to be tapped.

Recognizing these potential benefits, President Reagan has made the privatization of certain government activities one of the key objectives of his second term. Framing the issue in very clear terms, he has said:

> "Traditionally, governments supply the type of needed services that would not be provided by the marketplace. Over the years, however, the Federal Government has acquired many commercial-type operations. In most cases, it would be better for the Government to get out of the business and stop competing with the private sector..."

To contribute to this effort, the Office of Personnel Management has been searching for ways to encourage one particular type of privatization: the contracting out of commercial activities to the private sector.

For the past thirty years, the policy which -- on paper -- governs decisions to contract out commercial activities has not received the attention it deserves. Outlined in OMB Circular A-76, the policy calls for government reliance on the private sector for the economical provision of needed goods and services. An excellent policy, but one which too frequently has gone unused.

We are all familiar with the reasons why this policy has not worked: the disincentives for federal managers and employees; federal union opposition; and Congressional concern resulting in the imposition of restrictions and bans. Obviously we are in need of a fresh approach.

The highly successful privatization strategy employed by Great Britain offers us some guidance. There, opposition to privatization all but disappeared when government employees were turned into business owners, public housing tenants into homeowners, and so on. Success entailed developing "counter-constituencies" with strong interests in privatization and a willingness to forego (some of) the immediate influx of revenue which (potentially) could have been generated by outright sales of the activities. The activities turned over to the private sector, however, were those where the end-user was also the private sector. The British experiment is therefore most applicable to loan portfolios, power marketing administrations, and similar operations directly serving the private sector. But can we learn from this approach and apply it where the government is the consumer?

Searching for the Solution

In seeking a solution, we realized that four main groups would have to be satisfied that our approach was both equitable and economical: federal employees, private sector contractors, the Congress, and the taxpayers. Any realistic proposal, then, would need to meet three basic criteria -- all critical to gaining support from the main players:

1) Does the plan address federal employee interests and concerns?

2) Does it address business interests and concerns?

3) Is it fiscally sound?

We believe we have developed a proposal which meets these criteria. Forming the core of this proposal is the concept of granting a fixed-term, sole-source contract -- at current cost -- to an employee-owned corporation. This, however, raises three problems:

1) Most government operations which could be contracted out do not have self-contained administrative support units handling personnel, payroll, accounting, purchasing, and the like.

2) Current cost contracts would do nothing to reduce the deficit.

3) Both Congress and the Administration have demanded more competitive contracting policies.

4) Current private sector firms would be locked out of the picture.

These problems can be resolved through a joint venture approach -- by competitively offering a majority share (at least 51 percent) of the newly-formed businesses to the highest bidding contractor firms, and giving a minority share (up to 49 percent) to the employees currently serving in the operations to be contracted out.

Description of Proposal

Called the "Federal Employee Direct Corporate Ownership Opportunity Plan" (FED CO-OP), the key elements of the proposal are as follows:

- An agency or neutral oversight organization would determine the current cost of a particular in-house commercial activity and set necessary performance levels for the activity.

- A newly-established firm would be given a sole-source contract to perform the activity for a fixed term -- perhaps three years -- at current costs, with normal performance requirements and non-performance penalties.

- Employees currently performing the function would be given 49 percent ownership in the new firm. The remaining 51 percent would be awarded on a competitive basis to the highest bidding contractor, including perhaps the employees themselves if they chose to bid. Thus the market would determine the value of the firm and its stock.

- With 51 percent of the stock, the high bidder would have a controlling interest in the new firm. Providing this controlling interest is critical because the new business will need to have the ability to streamline operations, just as an A-76 bidder does currently.

- In return for the risk the employees would bear, the high bidder will be obligated to purchase at the same price per share any and all stock tendered by employees from the time of the contract award up to six months later. Subsequent to this time, shares would be bought and sold on a fully voluntary basis or according to applicable law.

  The government would still provide the full range of benefits currently available to separated employees: severance pay (averaging about $3,700); job placement assistance; right-of first-refusal for job openings with the contractor; unemployment compensation, etc.

- Employee shares would be distributed on a pro rata basis. One possible formula -- accounting for both longevity and salary levels -- would be to divide the shares according to past lifetime earnings in the federal government. All employees would become shareholders in the new firm, regardless of whether they ultimately were employed by the firm.

- At the end of the three-year contract, the commercial activity would be recompeted, with no preference given to the joint venture firm. Based on experience, however, incumbents have a high probability of retaining the contract.

Hypothetical Example

To give a clearer sense of how FED CO-OP would play out in practice, we developed a simplified hypothetical example. Assuming a commercial activity which costs the government $1,000,000 per year to run, how much would a contracting firm be willing to bid for the contract, taking into account: the estimated cost of running a streamlined organization; expected profit; ownership of 51 percent of the firm; and liability (to current employees) for the remaining 49 percent? Based on average savings from A-76 implementation, we are assuming the contracting firm could reduce costs by about 30 percent.

Cost of current government operations	$1,000,000
Estimated private sector cost (70% of current cost)	- $700,000
"Discretionary revenue"	$300,000

Over the three-year contract, "discretionary revenue" would equal $900,000. We could expect the bid to be approximately 51 percent of this "discretionary revenue" or $459,000. Initial value of employees' shares would be 49% of "discretionary revenue" or $441,000. An operation of this size would have about 30 employees. On average, then, these employees could expect shares in the new corporation equalling approximately $15,000. Not an insubstantial incentive!

Obviously, all else being equal, savings would be greater if we followed a direct conversion to contract approach without the employee ownership aspect. We are assuming, however, that such an approach would meet with agency, employee, and union resistance, and result in additional Congressional bans and restrictions. Thus, the resulting low level of contracting out would net rather small savings. If FED CO-OP allows twice as much contracting out as the direct conversion to contract approach -- and we believe it will allow much more -- we have succeeded.

Summary

FED CO-OP provides employees with substantial incentives to participate in the privatization process; in fact, we believe that employees in some operations will become the prime motivating force behind privatization. Private sector contractors should respond positively as they see a far larger number of commercial activities opened to the bidding process, without the lengthy and litigious A-76 cost comparison process and without agency foot-dragging. Finally, the government receives up-front 51 percent of the savings from three years of a contracted operation, thus helping to alleviate the government's fiscal situation. (And after recompetition at the end of the three-year contract period, the government would begin receiving 100 percent of the savings from the contracted operation.) In addition, the government is finally able to live up to its commitment to rely on the private sector for the provision of commercial goods and services.

This is a broad outline of the FED CO-OP proposal. We hope it will become a focal point for discussion of how to encourage privatization. Over the next few months, working closely with all interested parties, we will revise the plan and develop details based on the comments we receive.

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

8 APR [illegible]

Honorable John W. Warner
United States Senate
Washington, D.C. 20510

Dear John:

I am pleased to be able to respond to the concern raised by your constituent, Ms. Robena J. Brown, regarding the President's proposal to seek privatization of the National Technical Information Service (NTIS).

First, I want to assure you that there are no plans to dismantle NTIS. The statement in Ms. Brown's letter (which has also appeared in the press) that NTIS will be sold is not true. In fact, this option was considered and specifically ruled out as not in the best interest of the government.

Privatization in this instance, means that private firms, if interested, will be provided an opportunity to operate NTIS on a contract basis. The government will retain overall policy direction in order to ensure preservation of the important and appropriate NTIS functions that might not be retained if profit were the sole incentive.

I believe we can all agree that the day to day activities of NTIS are commercial in nature. It is the President's belief that the government should not compete with private firms that have the ability and expertise to provide these services. His proposal is simply to ascertain if such private firms exist and are interested in such an arrangement.

The Administration is considering a plan under which the NTIS employees would become stockholders of the contracting firm. This approach could be very advantageous for the private sector, NTIS employees, and, especially NTIS customers. I am enclosing an article which briefly explains the FED COOP approach and how it can benefit NTIS employees.

3/27 Issue of Budget and Program

The Department of Commerce has formed two working groups to develop the pros and cons of both approaches. I would like to take this opportunity to enlist your active support in preventing imposition of a legislative prohibition on pursuing privatization options for NTIS. I am convinced that such an obstacle would be a disservice to NTIS employees and customers.

I hope this information helps in replying to your constituent. Please let me know whenever we may be of assistance.

Sincerely yours,

Joseph R. Wright, Jr.

Joseph R. Wright, Jr.
Deputy Director

Enclosure

BUDGET AND PROGRAM

NEWSLETTER
Box 6269
Washington, D.C. 20015
(202) 881-1777

VOL. [illegible] NO. 13

Washington, March 27, 1987

A-76.

This is the OMB bulletin providing for conversion of commercial activities at federal agencies...to private contractors.

It has stirred up a hornet's nest...of opposition. The policy began many years ago, was spurred by President Carter and is now being pushed by the Reagan White House.

But federal employees, their unions, and friends in Congress...have vehemently objected.

What is the result?

According to federal officials...the program has "failed." The number of conversions is far less than planned, with a limited group of organizations participating.

Approximately 600,000 jobs have been identified as potentially susceptible to A-76 action...more than a quarter of the federal workforce. On the other hand, 30,000 jobs have been contracted out since 1979.

Constance Horner, Director of the Office of Personnel Management, feels more could be done to make the conversions acceptable to employees. She cites the British example, where privatization of British Airways, Vickers Shipbuilding, Rolls-Royce, Jaguar, as well as oil, transportation and communications operations have taken place or are planned.

These actions have the full support of workers...because they receive free shares in the companies and the right to buy more at a discount.

She watched union leaders on TV protesting the delay in such conversions. After listening to so many complaints in Washington at the idea of switching to contractors...it was an eye-opening experience.

OPM says that although contractors may benefit from A-76 conversions in the United States...federal workers who "stand to lose their jobs and perhaps their pensions," can be "devastated" by them.

As a result...new ways of gaining worker support are being sought. The program is called FED COOP. Latest approach, which has not yet been officially proposed, is as follows:

1. When the government decides to contract out a specific function, a private accounting firm is hired to determine the "true total cost to the government of operating the activity." A request for bids is then issued, offering private firms an opportunity to seek a three-year contract for the job.

2. Any bidder must include provision for an Employee Stock Ownership Plan (ESOP). This is an employee benefit trust, well established in the U.S. private sector as a method of employee ownership participation.

Copyright © 1987 Budget and Program
Material may not be reproduced in whole or in part.

- In one example cited, Lowe's Company, a U.S. retail chain, employees own a quarter of the stock, and OPM says warehouse workers earning $175 a week "have left Lowe's with half a million dollars worth of stock." However, some ESOP's are not successful.

3. Under the new OPM proposal, the contractor must fund the ESOP entirely...workers do not pay. The bidder does this out of savings it proposes to achieve below government costs. Historically, these are estimated at about 30% under A-76 conversions. Each employee is to be given a stake...based on salary.

4. The winning bidder is also obligated to hire all federal workers currently on the job who want to switch.

- It would have to keep them at least 180 days. Anyone released during the first year would receive cash equaling 25% of total compensation. No new laws are necessary...to start this program.

An OPM paper concludes that if the idea is carried out, federal workers "will be thrust into the roller coaster world of the private sector." They could build up significant capital or "go under and be back out on the street."

OPM hopes that employee opposition will be neutralized...by this approach or something similar.

Copyright © 1987 Budget and Program
Material may not be reproduced in whole or in part.